

FULL-LINE CATALOG









THE POWER OF BLUE®



MORE POWER TO

Miller recognizes that **The Power of Blue**® is not only in our products, services, and offerings—it's in you. Because you expect quality products, count on industry experience, and require responsive support, you push us to find innovative solutions to your biggest welding challenges.

The Power of Blue is all about you. You can maximize your productivity with reliable, easy-to-use, innovative Miller equipment that reduces downtime and increases efficiency. You can expand your capabilities with Miller products that are proven in the world's toughest applications under the most extreme conditions. And you can grow your business with a total welding solution from Miller. You have the power—

The Power of Blue.



Enjoy the catalog! To see list prices or find your local distributor, go to our Web site MillerWelds.com or give us a call at 1-800-4-A-MILLER (1-800-426-4553)

Follow Us:







GET MORE ON YOUR MOBILE!

With Microsoft® Tags, Miller lets you instantly access more information from your web-enabled camera phone.

Start by downloading the free mobile app at http://gettag.mobi

1 FIND A TAG

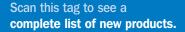
Look for tags throughout the catalog near products of interest.





Microsoft Tag Reader is not available on all mobile phones. There are no charges to use the software, but individual carrier rates may still apply.

WHAT'S **NEW** FROM BLUE?









46

Wireless Remote Controls



52

XMT® WCC (Weld Cable Control) System



Big Blue® 350 PipePro® System



Big Blue® 400 Eco Pro



Spectrum® 875 Auto-Line™



Folding ArcStation™ and Accessories



FILTAIR™ SWX Series



Arc Armor™ Products

SCAN A TAG

79

Open your *TagReader* app and center the tag on your screen. (On some devices, you may need to click "scan" and snap a picture.)



Gain instant access to additional content, such as, videos, product

details, etc.



If you're not familiar with welding basics, the following information can make choosing a machine easier. For interactive, highly informative assistance, go to **MillerWelds.com**.

1 PICK YOUR WELDING OR CUTTING PROCESS

Select the process that matches the metals you want to weld or cut.

Metal Type	Stick	MIG	FCAW	SAW	AC-TIG	DC-TIG	Resistance Spot	CAC-A AC	CAC-A DC	Plasma
Steel	•	•	•	•		•	•		•	•
Stainless Steel	•	•	•	•		•	•			•
Nickel Alloys	•	•				•	•			
Aluminum		•			•					
Cast Iron	•									
Copper, Brass		•				•		•		
Titanium						•				
Magnesium Alloys					•					•
All Electrically Conductive										•
Skill Level	Moderate	Low	Low	Moderate	High	High	Low	Moderate	Moderate	Low
Key: Recommended				Welding Pr	ocess			Cu	tting Proc	ess

2 UNDERSTAND PROCESS ADVANTAGES

Unfortunately, there is no single welding or cutting process suitable for all applications. For this reason, it is necessary to consider the advantages of one process over another.

Welding Process



Stick (SMAW)

- Better suited for windy, outdoor conditions
- More forgiving when welding on dirty or rusty metal



MIG (GMAW)

- Easiest process to learn
- High welding speeds possible
- Provides better control on thinner metals
- Cleaner welds possible with no slag to clean
- Same equipment can be used for Flux Cored welding

Pulsed MIG (GMAW-P)

- Flexibility and productivity nearly all metals can be welded in all positions
- Larger diameter electrode wires
- Virtually no spatter
- Welds thin to thick metals



Flux Cored (FCAW)

- Works as well as Stick on dirty or rusty material
- Out-of-position welding
- Deep penetration for welding thick sections
- Increased metal deposition rate



Resistance Spot

Portable, easy-to-operate welder for light industrial applications



Submerged Arc (SAW)

- High deposition rates can enhance weld speed and production
- Excellent mechanical properties for high-quality code and X-ray requirements
- Improves welding operator comfort and appeal arc is below a bed of flux



TIG (GTAW)

- Provides highest quality and most precise welds
- Highly aesthetic weld beads
- Allows adjustment of heat input while welding by use of a remote control

Pulsed TIG (GTAW-P)

- More control on thin metals
- Less heat distortion on thin metals

Cutting Process



Air Carbon Arc Cutting and Gouging (CAC-A)

- Wide variety of metals
- Removes discontinuities or inferior welds



Plasma Arc Cutting and Gouging (PAC)

- Use with any electrically conductive metals
- Small and precise cut
- Small heat-affected zone which helps prevent warping or paint damage

PICK YOUR POWER AND PORTABILITY NEEDS

What should I know about duty cycle?

Duty cycle is the amount of time during a 10-minute period that the welder can continuously operate at its rated output without causing heat damage to the system. For example, a Millermatic 252 has 60% duty cycle at 200 amps of DC output. It can weld for six minutes out of 10 and then needs to cool for the remaining four minutes.

For applications requiring extensive arc-on time and/or welding at high amperages, choose a welder with a higher duty cycle, such as a Deltaweld 452 with 450 amps of DC output at 100% duty cycle. If a welder is operated below its rated output, the duty cycle typically increases.

How much welding or cutting output power do I need?

- Light Industrial products are suitable for the home hobbyist or occasional user. Designed to be easy to operate, affordably priced and typically have a 20% duty cycle and rated output of 230 amps or lower.
- Industrial products are suitable for applications that do not require high-volume production and typically have a 40 – 60% duty cycle and/or rated output of 300 amps or lower. Appropriate choice for professional welders.
- Heavy Industrial products typically have a duty cycle of 60 100% and a rated output of at least 300 amps, making them suited to high-volume production and/or welding of thicker materials. Designed with the arc characteristics and product features professional welders demand for code-quality work.

Note: Units listed in more than one classification share attributes of both.

Generator power

Out in the field, you may need an engine-driven welder/generator to supply 120 or 240 VAC power to run tools, lights and to start motors. Miller's engine drives are packed with power and the larger units even offer option packages that add 10 to 20 kW of generator power.

What kind of input power do I have available?

To select the right product, you need to know the type of primary power available.



Single-phase products require single-phase input power, typically found in homes and garages.



Three-phase products require three-phase input power which is common in industrial settings, but shops can be specially wired to supply three-phase, industrial power.



For locations where an electrical hook-up is not practical, consider a gas or diesel-powered, engine-driven welder/generator to supply welding and generator power.

Is portability needed?

Can you bring the work to the machine, or does the machine need to go to the work? Check the Product Guide pages for types of portability:

- Shoulder strap, handles, running gear, carts, etc.
- Many engine-driven welding generators fit in the back of a pick-up truck, enabling them to drive to wherever the welding is needed. Heavy-duty trailers are also available for engine drives.

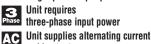




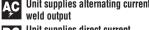
Unit requires single-phase input power



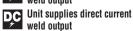
Unit supplies alternating current and direct current weld output



Unit supplies constant current weld output









Unit supplies constant current and constant voltage weld output

4 CHECK OUT THE PRODUCT GUIDES

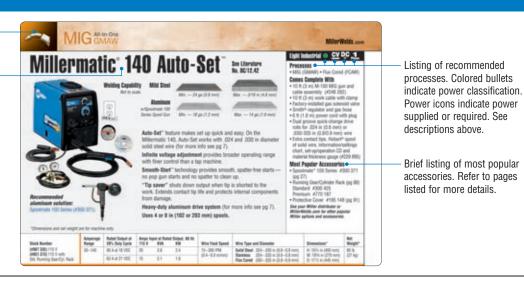
The Product Guides (start of each major section) contain a list of Miller's power sources for that process section. Note: Visit MillerWelds.com for the most current information.

GO TO PRODUCT DESCRIPTIONS

Each color-coded section is identified by a primary process icon and title.

For more product specifications, give the product name and literature number to your distributor, visit us on the Web at MillerWelds.com or call 1-800-4-A-MILLER.

Note: Product specifications subject to change without notice.





GMAW

/liller/Welds.com/MIG







	Product Guide	Page	Class	MIG	MIG-P	Flux Compd*	CAC-A	Portability	Weldable Metals	Welding Output Range	Special Features	Typical Applications
	Millermatic® 140 Auto-Set™	8	•	•				Handle, optional running gear	Steel, stainless,	30-140 A	115 VAC input, Auto-Set,™ Smooth-Start™	Up to 3/16 in** maintenance/repair, auto body, hobby
	Millermatic [®] 180 Auto-Set [™]	8	•	•					aluminum	30-180 A	230 VAC input, Auto-Set,™ Smooth-Start™	Up to 5/16 in*** maintenance/repair, auto body, hobby
ase	Millermatic® Passport® Plus	9	•	•				Handle	dle		Welds on 115 or 230 V input, includes 12 oz gas cylinder inside power source	Up to 3/8 in*** maintenance/repair, fabrication, auto body, farm/home, construction
1-Phase	Millermatic [®] 211 Auto-Set [™] w/MVP [™]	9	•	•				Handle, optional running gear		30-210 A	Welds on 120 or 230 V input, Auto-Set,™ Smooth-Start™	Up to 3/8 in*** maintenance/repair, auto body, hobby
	Millermatic [®] 212 Auto-Set [™]	10		•				Installed running gear		30-210 A	Fan-On-Demand™ Gun-On-Demand™	Up to 3/8 in*** fabrication, farm, garage/body shops
	Millermatic [®] 252	11		•							Standard timers menu, Fan-On-Demand,™ can connect standard MIG or push-pull gun	Up to 1/2 in*** industrial production/fabrication, farm
-	Millermatic [®] 350P	12	•	•				Installed running gear	Steel, stainless, aluminum	25-400 A	Can connect a standard MIG gun or push-pull gun	Up to 1/2 in*** industrial production/fabrication Pulsed MIG ideal for thin gauge aluminum
& 3-Phase	AlumaFeed™ Synergic Aluminum Welding System	13	•	•	•			Handles, optional cart, MIGRunner	Aluminum	5-425 A 10-38 V	Profile Pulse, lightweight feeder can be carried up to 100 ft from power source	Heavy industrial aluminum production/fabrication, truck trailer, shipbuilding
	Invision™ MPa Plus System	18						Handles, optional cart, MIGRunner	Most metals	5-425 A 10-38 V	Alumination™ allows push/pull gun. Optimized with 74 MPa Plus wire feeder	Manufacturing and production
	XMT® Series	50	•	See	e the	e M	ultipro	cess section on page 48.				
	CP-302	16	•	•				Lift eye, optional running gear,	Most metals	14-44 V	Hi/Lo stabilizer, power efficient	Equip/auto mfg, metal fab, construction, agri equipment
	Delta-Fab™ System			•				MIGRunner		10-45 V	Material-specific output terminals	Light to medium fabrication, manufacturing
	Deltaweld® 302	17								15-32 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment
	Deltaweld® 452	17					1/4-			15-38 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment
99	Deltaweld® 652	17					3/8"			15-44 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment
3-Phase	Invision™ 456MP	19					1/4"	Handles, optional cart		10-38 V	Pulsing made easy	Metal fabrication, manufacturing
3-	Invision™ 456P	19					1/4-	MIGRunner		10-38 V	600 A max output, power efficient	Industrial production, manufacturing
	Axcess® 300	20						Optional cart,		10-44 V	Auto-Line,™ Accu-Pulse™	Manufacturing and production
	Axcess® 450	20					1/4"	MIGRunner		10-44 V	Auto-Line,™ Accu-Pulse™	Manufacturing and production
	Axcess® 675	20					3/8"			10-44 V	Auto-Line, [™] Accu-Pulse [™]	Manufacturing and production
	Dimension™ Series	49		See	e the	M	ultipro	cess section on page 48.				
	PipeWorx™ System	54		See	e the	Pi	peWor	x Welding System on pag	e 54.			

PRODUCT KEY

CLASS: • Light Industrial • Industrial • Heavy Industrial
*If using self-shielded wire on a CC/CV machine, use CV weld output.
For more detailed information, see individual specification sheets.

**In a single pass using self-shielded wire.

***In a single pass.

All-In-One MG

Millermatic[®] Series

Whether it's thick steel or thin aluminum, conventional MIG or Pulsed MIG, the Millermatic line combines easy-to-use features with ultimate arc performance to give you the best all-in-one MIG welders in the industry.





Scan this tag to see videos on Millermatic features.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.

Auto-Set™

Available on Millermatic 140.180.211.212.

The right setting automatically.

- Set the wire diameter, a blue light shows that Auto-Set is activated
- Dial in the thickness of what you're welding
- Start welding with the exact parameters you need!



No more burnthrough and rework. Correct Auto-Set parameters make it easy to get quality welds, every time.

Weld flexibility with infinite voltage control.

You also have the flexibility to manually adjust weld parameters to the exact settings you want. This comes in handy for broader welding applications such as aluminum or stainless steel.

Aluminum solutions. Whether you purchase a Millermatic 140 Auto-Set and a Spoolmate 100 Series spool gun or a Millermatic 350P with an Aluma-Pro push-pull gun, the entire Millermatic product line now offers an aluminum solution for your application.

Material thickness gauge.

To help select parameters every Millermatic that features Auto-Set now comes with a material thickness gauge.



Aluminum drive systems. Every Millermatic features a heavy-duty aluminum drive system designed to provide superior feeding and durability. The toolless, quick-change reversible drive rolls and easy-to-set scaled tension knob make them the easiest to use in the industry.

Thermal overload protection. Designed to protect your investment, every Millermatic is now equipped with built-in thermal overload protection... not that you'll need it.

Set-up and operation CD. Miller makes it easy to get started. Every Millermatic comes standard with a CD that goes through the basics of how to set up and operate your machine to get optimal results.

True Blue® 3-year warranty. You should never have an issue with your Millermatic... but just in case. Welder is warranted for three years, parts and labor. Original main power rectified parts are warranted for five years. Gun is warranted for 90 days parts and labor.



Product selection made easy!

An online product selection tool designed specifically for the personal user or light fabricator. With this tool, customers can simply select their process, answer a few questions, and find the right welder or plasma cutter for their needs. It's easy, it's fast, it's smart—it's the Smart Selector. Check it out at MillerWelds.com/select

Millermatic® Product Selector

		Thick	ness of Steel W	elded in a Singl	e Pass		
Machine	Thin Gauge	3/16 in	1/4 in	5/16 in	3/8 in	1/2 in	Features
Millermatic® 350P		300 A		/460 VAC cle, 1-Phase or 3	-Phase		Pulsed MIGPush-Pull Gun/Spool Gun ReadyMillermatic Reach Wire Feeder Compatible
Millermatic® 252				230/460/575 VA % Duty Cycle			 Standard Timers Menu Push-Pull Gun/Spool Gun Ready for Alum Apps Millermatic Reach Wire Feeder Compatible
Millermatic® 212 Auto-Set™		160	208/230 VAC A at 60% Duty C	Cycle			 Auto-Set™ • Gun-On-Demand™ • Spool Gun Ready for Aluminum Applications • Millermatic Reach Wire Feeder Compatible
Millermatic® 211 Auto-Set™ w/MVP™	120 VAC: 90 A at	t 20% Duty Cycle) 150	230 VAC A at 30% Duty (Cycle		• MVP™ Plug • Dual Voltage Input • Auto-Set™ • Spool Gun Ready
Millermatic® Passport® Plus	115 VAC: 11	10 A at 20% Duty	Cycle		VAC % Duty Cycle		• MVP™ Plug • Auto-Line™ • Spool Gun Ready • 45 lb
Millermatic® 180 Auto-Set™			VAC ⁄⁄6 Duty Cycle				• Auto-Set™ • Spool Gun Compatible
Millermatic® 140 Auto-Set™	115 90 A at 20%						• Auto-Set™ • Spool Gun Compatible



Millermatic® 140 Auto-Set™



Mild Steel

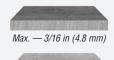
w/Spoolmate 100

Series Spool Gun

Min. — 24 ga (0.8 mm) **Aluminum**

Min. — 18 ga (1.2 mm)

See Literature



Max. — 14 ga (1.9 mm)

EXCLUSIVE! Auto-Set™ feature makes set up quick and easy. On the Millermatic 140. Auto-Set works with .024 and .030 in diameter solid steel wire (for more info see pg 7).

Infinite voltage adjustment provides broader operating range with finer control than a tap machine.

Smooth-Start™ technology provides smooth, spatter-free starts no pop gun starts and no spatter to clean up.

"Tip saver" shuts down output when tip is shorted to the work. Extends contact tip life and protects internal components from damage.

Heavy-duty aluminum drive system (for more info see pg 7). Uses 4 or 8 in (102 or 203 mm) spools.

Light Industrial

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 10 ft (3 m) M-100 MIG gun and cable assembly (#248 282)
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid valve
- . Smith® regulator and gas hose
- 6 ft (1.8 m) power cord with plug
- Dual groove quick-change drive rolls for .024 in (0.6 mm) or .030/.035 in (0.8/0.9 mm) wire
- Extra contact tips, Hobart® spool of solid wire, information/settings chart, set-up/operation CD and material thickness gauge (#229 895)

Most Popular Accessories

- Spoolmate[™] 100 Series #300 371 (pg 27)
- Running Gear/Cylinder Rack (pg 88) Standard #300 425 Premium #770 187
- Protective Cover #195 149 (pg 91)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

*Dimensions and net weight are for machine only.

Stock Number (#907 335) 115 V (#951 373) 115 V with Std. Running Gear/Cyl. Rack

20% Duty Cycle
90 A at 18 VDC
63 A at 21 VDC

Rated Outnut at

Amps In	put at Rate	d Output, 60 Hz	
115 V	KVA	KW	Wire Feed Speed
20	2.8	2.4	15-390 IPM (0.4-9.9 m/min)
15	2.1	1.8	(0.4-9.9

Wire Feed Speed	Wire Type and Diameter
15-390 IPM (0.4-9.9 m/min)	Solid Steel .024030 in Stainless .024030 in
(/	Flux Cored 030 - 035 in

riic iypc c	illa Dialifetei
olid Steel	.024030 in (0.6-0.8 mm)
tainless	.024030 in (0.6-0.8 mm)
lux Cored	.030035 in (0.8-0.9 mm)

Dimensions*	Net Wei
H: 15¾ in (400 mm) W: 10¾ in (270 mm)	60 II (27
D: 17½ in (445 mm)	'

Weight*

60 lb

(27 kg)

Millermatic® 180 Auto-Set™

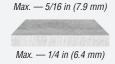
Welding Capability Not to scale. Recommended aluminum solution:

Mild Steel

Aluminum w/Spoolmate 100 Series Spool Gun







Welds thickest material in its class — up to 5/16 in (7.9 mm) in a single pass!

EXCLUSIVE! Auto-Set[™] feature makes set up quick and easv. On the Millermatic 180, Auto-Set works with .024 and .030 in diameter solid steel wire (for more info see pg 7).

Infinite voltage adjustment provides broader operating range with finer control than a tap machine.

Smooth-Start™ technology provides smooth, spatter-free starts no pop gun starts and no spatter to clean up.

"Tip saver" shuts down output when tip is shorted to the work. Extends contact tip life and protects internal components

Heavy-duty aluminum drive system (for more info see pg 7). Uses 4 or 8 in (102 or 203 mm) spools.

Light Industrial

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 10 ft (3 m) M-100 MIG gun and cable assembly (#248 282)
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid valve
- · Smith® regulator and gas hose
- 6 ft (1.8 m) power cord with plug
- Dual groove quick-change drive rolls for .024 in (0.6 mm) or .030/.035 in (0.8/0.9 mm) wire
- Extra contact tips, Hobart[®] spool of solid wire, information/settings chart, set-up/operation CD and material thickness gauge (#229 895)

Most Popular Accessories

- Spoolmate™ 100 Series #300 371 (pg 27)
- Running Gear/Cylinder Rack (pg 88) Standard #300 425 Premium #770 187
- Protective Cover #195 149 (pg 91)

Mot

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

*Dimensions and net weight are for machine only.

Amnorano

Spoolmate 100 Series (#300 371).

Stock Number
(#907 312) 230 V
(#951 374) 230 V with
Std. Running Gear/Cyl. Rack

Range	Rated Output	230 V	KVA	KW	Wire Feed Speed	
30-180	135 A at 22.5 VDC, 30% Duty Cycle	21.7	5.0	4.1	60-540 IPM (1.5-13.7 m/min)	

Amns Innut at Rated Outnut 60 Hz

d	Wire Type and Diameter	Dimensions*	Weight*
1)	Solid Steel .024035 in (0.6-0.9 mm) Stainless .024035 in (0.6-0.9 mm) Flux Cored .030045 in (0.8-1.2 mm)	H: 15 ³ / ₄ in (400 mm) W: 10 ⁵ / ₈ in (270 mm) D: 17 ¹ / ₂ in (445 mm)	72 lb (33 kg)









Millermatic[®] Passport[®] Plus

Welding Capability Not to scale.

Mild Steel

Aluminum

w/Spoolmate 100 Series Spool Gun







Max. — 1/4 in (6.4 mm)

Portability is #1 because not all jobs can come to you. Weighing only 45 lb and running either 115 or 230 V, the Passport Plus is great for steel, aluminum and stainless steel jobs you need to go to.



Multi-voltage plug (MVP™) allows connection to 115 or 230 V receptacles without tools.

Excellent arc characteristics! Unit offers positive arc starts and an extremely stable arc with minimal spatter on both mixed gases and straight CO2.

Wire Feed Speed

40-400 IPM

Flexibility to use either external or internal gas cylinder. Self-contained gas cylinder provides 25 minutes of arc time or about 25 ft of weld on

to 115/230 VAC, single-phase power.

Light Industrial

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 10 ft (3 m) power cord and MVP[™] adapter plugs for 115 and 230 V
- 10 ft (3 m) M-100 MIG gun and cable assembly #248 282
- 10 ft (3 m) work cable with clamp
- One CO₂ gas cylinder (empty)
- Dual-groove, quick-change drive rolls for .024 in (0.6 mm) and .030/.035 in (0.8/0.9 mm) wire
- Two contact tips for .024 in (0.6 mm) wire and two for .030 in (0.8 mm) wire

Most Popular Accessories

- Spoolmate™ 100 Series #300 371 (pq 27)
- MVP™ Plugs (pg 93)
- CO₂ Gas Cylinder (empty) #195 272

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Dimensions

H: 151/2 in (394 mm)

D: 201/2 in (520 mm)

W: 12 in (305 mm)

Recommended aluminum solution: Spoolmate 100 Series (#300 371).

Amnerage

Range

30-140

Innut

Power

115 VAC

3/16 in thick material with .030 in mild steel wire. **Auto-Line**[™] provides state-of-the-art flexibility, automatically connecting

Impact-resistant polymer case provides strength and durability while protecting the internal components and welding wire.

(#907 401) 115/230 VAC	

Stock Number

_	in [®] 9	11	Λ+	<u> </u>	■ ™	RAI	ТМ	Light Ir
230 VAC 30-180	150 A at 21.5 V	_ 1	18 4.0	3.8	(1.0-10 m/min)	Stainless Flux Cored	.024035 in (0.6- .030035 in (0.8-	

Amps Input at Rated Output, 50/60 Hz

KVA

230 V

'MALIC ZII AULU-ƏCL with IVIV

115 V

See Literature No. DC/12.54



*Dimensions and net weight are for machine only.

Mild Steel

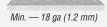
Rated Output at

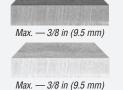
20% Duty Cycle

110 A at 195 V

Aluminum w/Spoolmate 100 Series Spool Gun







Wire Type and Diameter

Solid Steel .024-.035 in (0.6-0.9 mm)

Welds thickest material in its class—up to 3/8 in (9.5 mm) in a single pass!

EXCLUSIVE! Auto-Set™ feature makes set up quick and easy. On the Millermatic 211, Auto-Set works with .030 and .035 in diameter solid steel wire (for more info see pg 7).

Infinite voltage adjustment provides broader operating range with finer control than a tap machine.



Multi-voltage plug (MVP™) allows connection to 120 or 230 V receptacles without tools.

"Tip saver" shuts down output if tip is shorted to work. Extends contact tip life and protects internal components from damage.

Smooth-Start[™] technology provides smooth, spatter-free starts.

Light Industrial

Net Weight

45 lb

(20.4 kg)

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 6 ft (1.8 m) power cord and MVP[™] adapter plugs for 115 and 230 V
- 10 ft (3 m) M-100 MIG gun and cable assembly #248 282
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid valve
- Smith® regulator and gas hose
- · Dual groove guick-change drive rolls for .024 in (0.6 mm) or .030/.035 in (0.8/0.9 mm) wire
- Extra contact tips. Hobart® spool of solid wire, information/settings chart, set-up/operation CD and material thickness gauge (#229 895)

Most Popular Accessories

- Spoolmate[™] 100 Series #300 371 (pg 27)
- Running Gear/Cylinder Rack (pg 88) Standard #300 425 Premium #770 187
- Protective Cover #195 149 (pg 91)

See vour Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Stock Number
(#907 422) 120/230 V
(#951 375) 120/230 V
with Standard Running
Gear/Cylinder Rack

Stock Numl	ber
(#907 422) (#951 375)	
with Standa Gear/Cylind	

	Power	Range	
V V	120 VAC	30-140	
ng	230 VAC	30-210	

Input Power	Amperage Range	Rated Outp
120 VAC	30-140	90 A at 20 V 20% Duty C
230 VAC	30-210	150 A at 23 30% Duty C

r	Amperage Range	Rated Output	Amps In	put 2
AC	30-140	90 A at 20 V at 20% Duty Cycle	20	-
AC	30-210	150 A at 23.5 V at 30% Duty Cycle	_	2

	Amps Inp 115 V	ut at Rated 230 V	Output, KVA	60 Hz KW	Wire Feed Speed
t le	20	_	2.9	2.5	60-540 IPM (1.5-13.7 m/min)
V at le	_	24.3	5.5	4.8	



Millermatic® 212 Auto-Set™

Welding Capability 230 V IN

Not to scale.

Mild Steel



Max. — 3/8 in (9.5 mm)



Max. — 3/8 in (9.5 mm)

EXCLUSIVE! Auto-Set[™] feature makes set up quick and easy. On the Millermatic 212, Auto-Set works with .030 and .035 in diameter solid steel wire (for more info see pg 7).

Infinite voltage adjustment. When used in manual mode provides broader operating range with finer control than a tap machine.

Fan-On-Demand™ cooling system only operates when needed reducing power consumption.

Compatible with Spoolmate™ 200 Series spool gun with wire feed speed control on the gun. Saves time by reducing trips back to the machine. Also compatible with more industrial Spoolmatic® 15A or

Gun-On-Demand. Simply pull the trigger for either gun and you're ready to weld. No wasted time installing modules and using gas valve kits.

Heavy-duty aluminum drive system (for more info see pg 7).

CV DC 1 Industrial

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 15 ft (4.5 m), 250 amp M-25 gun
- 10 ft (3 m) work cable with clamp
- Smith® argon mix regulator/flow gauge w/hose
- 7 ft (2.1 m) power cord and plug
- Factory-installed running gear/ cylinder rack
- .030/.035 in reversible dual groove drive rolls
- Extra contact tips, set-up/operation CD and material thickness gauge (#229 895)

Most Popular Accessories

- Millermatic® Reach Wire Feeder #907 438 (see below)
- Spoolmate[™] 200 Series Spool Gun for aluminum welding #300 497 (pg 27)
- Dual EZ Cyl. Rack #300 337 (pg 88)
- Elevated Gun and Cable Rack #300 335 (pg 88)
- Protective Cover #195 142 (pg 91)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Recommended aluminum solution: Spoolmate 200 Series (#300 497).

Stock Number (#907 405) 200(208)/230 V (**#951 177)** 200(208)/230 V with Spoolmate 200 Series.

and Gas Hose

Dual Cylinder Rack, Regulator

Amperage Range **Rated Output** 30-210 160 A at 24.5 VDC. 60% Duty Cycle

Amps Input at Rated Output, 60 Hz 230 V KVÁ

Wire Feed Speed 50-700 IPM (1.3-17.8 m/min)

Wire Type and Diameter **Solid Steel** .023 - .035 in (0.6 - 0.9 mm) Stainless .023 - .035 in (0.6 - 0.9 mm) Flux Cored .030 - .045 in (0.8 - 1.2 mm)

H: 30 in (762 mm) W: 19 in (483 mm) D: 40 in (1016 mm)

Dimensions Weight 183 lb (83 kg)

Net

Millermatic® Reach Wire Feeder See Literature No. M/6.8

Use the Reach with your Millermatic 212 Auto-Set, 252, or 350P to extend your work area or to create a dual feeder, avoiding downtime from changing wire spools.



Extend your Millermatic work area up to 40 feet! No more moving the machine and pulling primary power cables around the shop.

Use as a dual feeder option! Keep one wire in the machine and a different wire in the feeder. No more downtime changing spools and drive rolls.

Polypropylene case with built-in slide rails gives you the ability to easily change wire when in vertical position. Holds a 12 in spool of wire.

EXCLUSIVE! Auto-Gun Detect.™ When connected to a Millermatic 252 or 350P, simply pull the trigger on either gun and the Millermatic machine will recall both voltage and wire feed speed of the active gun.

Synergic pulse capability when connected to Millermatic 350P. Remotely change weld output by simply adjusting wire feed speed setting.

Hybrid technology. Connects to Millermatic 10-pin and welding output circuit. Eliminates the need for a heavy mechanical contactor—

Works with any Miller-compatible MIG gun (sold separately).

Light Industrial Use only with Millermatic Power Sources.

Processes

- MIG (GMAW)
- Flux Cored (FCAW)
- Pulsed MIG (GMAW-P) with Millermatic 350P

Suggested Power Sources

- Millermatic® 212 Auto-Set™ (see above)
- Millermatic® 251 (discontinued product)
- Millermatic® 252 (pg 11)
- Millermatic® 350P (pg 12)

Suggested Guns

- MIGmatic[™] M-25 (GMAW) (pg 92)
- Bernard® Q300 (GMAW)

Most Popular Accessories

• Running Gear/Cylinder Rack (pg 88) Standard #300 425 Premium #770 187

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Stock Number (#907 438) 25 ft (7.6 m) Cable Assembly

Input Power Onerates on open-circuit voltage and arc voltage: 14-100 VDC Input Welding Circuit Rating 300 A at 60% Duty Cycle

Wire Feed Speed 50-700 IPM (1.3-17.8 m/min) Actual range is dependent on arc voltage applied

Wire Type and Diameter **Aluminum** .047 in (1.2 mm)

Solid Steel .023-.045 in (0.6-1.2 mm) Stainless 030 - 045 in (0.8 - 1.2 mm) Metal-Core .035-.052 in (0.9-1.3 mm) Flux Cored .030-.052 in (0.8-1.3 mm) Maximum Spool Size Capacity 12 in (305 mm), 45 lb (20 kg)

Dimensions H: 15¹/₂ in (394 mm) W: 9 in (229 mm) D: 21 in (533 mm)

Net Weight with Cable Assembly 48 lb (21.8 kg)

Millermatic® 252 See Literature No. DC/12.49

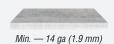
Welding Capability Not to scale.







Max. — 1/2 in (13 mm)



Max. — 3/8 in (9.5 mm)



w/Spoolmatic 15A or 30A Spool Gun

> Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

Integrated digital timers come complete with presettable preflow/postflow, burnback, spot and delay (Stitch) timers. Independent timers for MIG and spool gun.

Superior aluminum MIG welding with direct connection of optional XR push-pull guns, Spoolmatic 15A/30A and Spoolmate 200 Series spool guns. No extra module to buy or install.

EXCLUSIVE! Auto-Gun Detect™ automatically adjusts voltage, wire speed and timers for faster, easier switching between MIG, push-pull and spool guns.

Heavy-duty aluminum drive system (for more info see pg 7).

Fan-On-Demand[™] cooling system only operates when needed reducing power consumption.

15 ft (4.5 m) M-25 MIG gun features durable one-piece handle, unicable outer jacket, trigger rated for one million cycles, and steel spring coils protecting cable ends.

Industrial

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 15 ft (4.5 m), 250 amp M-25 MIG gun
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid
- Smith® argon mix regulator/flow gauge with hose
- 10 ft (3 m) industrial power cord and plug (plug on 200/230 V model only)
- · Factory-installed running gear/ cylinder rack
- .030/.035 in reversible dual groove drive rolls
- Extra contact tips
- Set-up and operation CD

Most Popular Accessories

- Millermatic® Reach Wire Feeder #907 438 (pg 10)
- XR[™]-A Push-Pull Guns (see below/pg 28/29)
- Spoolmate[™] 200 Series Spool Gun for aluminum welding #300 497 (pg 27)
- Spoolmatic® 15A Spool Gun for aluminum welding #195 156
- Spoolmatic® 30A Spool Gun for aluminum welding #130 831 (pg 28)
- Dual EZ-Change[™] Low Cylinder Rack #300 337 (pg 88)
- Elevated Gun and Cable Rack #300 335 (pg 88)
- Protective Cover #195 142 (pg 91)
- MIG Consumable Kit (pg 92)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Stock Number

(#907 321) 200(208)/230 V

(#907 322) 230/460/575 V

(#951 066*) 200(208)/230 V w/Spoolmatic 30A

(#951 065*) 230/460/575 V w/Spoolmatic 30A

*Comes complete with Dual Cylinder Rack, Regulator and Gas Hose.

Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V 230 V 460 V 575 V KVA KW	Wire Feed Speed Wire Type and Dia	meter Dimensions Weig	ght
30-300	200 A at 28 VDC, 60% Duty Cycle 250 A at 28 VDC, 40% Duty Cycle	48 42 21 17 10 7.7 (at 60% Duty Cycle)	50-700 IPM (1.3-17.8 m/min) Solid Steel .023045 in (0.6-Stainless .023045 in (0.6-Flux Cored .030045 in (0.8-	W: 19 in (483 mm) D: 40 in	

Featured Accessories



Wire Feeder Designed for Millermatics

Recommended

or 30A (#130 831).

aluminum solution:

Spoolmatic 15A (#195 156)

Millermatic Reach (see page 10)

#907 438 25 ft (7.6 m) cable assembly Extend your Millermatic work area up to 40 feet! No more moving the machine and pulling primary power cables around the shop. Or use as a dual feeder option! No more downtime changing spools and drive rolls. For use with Millermatic 212 Auto-Set, 251, 252 and 350P.

Note: For use with MIG guns only (sold separately).

Optional XR™A Push-Pull Guns



Direct connect to Millermatic 252 and 350P. Allows usage of 12 in rolls of aluminum reducing downtime from changing 1 lb spools.

Gun	XR-Aluma-Pro™ A	XR™-A Pistol
15 ft (4.6 m) Cable	#300 000	#198 127
25 ft (7.6 m) Cable	#300 001	_
30 ft (9 m) Cable	_	#198 128
35 ft (10.7 m) Cable	#300 264	_

Aluminum U-Groove Drive Roll and Accessory Kit	XR-Aluma-Pro™ A	XR™-A Pistol
.035 in (0.9 mm)	#195 311	#195 201
.047 in (1.2 mm)	#195 313	#195 202



Millermatic[®] 350P

Welding Capability Not to scale.



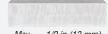




Max. — 1/2 in (13 mm)

Aluminum

w/Aluma-Pro Push-Pull Gun Min. — 18 ga (1.2 mm)



Max. — 1/2 in (13 mm)

Aluminum Pulse Hot Start™ automatically provides more arc power to eliminate a "cold start" that is inherent with aluminum starts.

Built-in Pulsed MIG programs. All programmed information is restored after each power up aluminum/steel/stainless steel/metal core.

Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

Integrated digital timers come complete with presettable preflow/postflow and spot timers. Independent timers for MIG and push-pull guns.

Superior aluminum MIG welding with direct connection of optional XR push-pull guns and Spoolmatic 15A/30A spool guns. No extra module to buy or install.

EXCLUSIVE! Auto-Gun Detect™ automatically adjusts voltage, wire speed and timers for faster, easier switching between MIG, push-pull and spool guns.

Heavy-duty aluminum drive system (for more info see pg 7).

Fan-On-Demand™ cooling system only operates when needed reducing power consumption and keeping internal components cleaner.

Industrial

CV DC 3 1

Processes

- MIG (GMAW)
- Flux Cored (FCAW)
- · Pulsed MIG (GMAW-P)

Comes Complete With

- 15 ft (4.5 m) Bernard® Q300 MIG gun with Centerfire™ consumables
- 10 ft (3 m) work cable with clamp
- · Factory-installed gas solenoid
- Smith® argon mix regulator/flow gauge with hose
- 10 ft (3 m) industrial power cord (without plug) for single- or three-phase
- · Factory-installed, low-mounted running gear/cylinder rack
- .035/.045 in reversible V-groove drive rolls (order U-groove drive rolls for aluminum welding)
- Extra contact tips
- Set-up and operation CD

Most Popular Accessories

- Millermatic® Reach Wire Feeder #907 438 (pg 10)
- XR[™]-A Push-Pull Guns (pg 11/28/29)
- Spoolmatic® 15A Spool Gun for aluminum welding #195 156 (pg 28)
- Spoolmatic® 30A Spool Gun for aluminum welding #130 831 (pg 28)
- Dual Cylinder Rack #195 299 (pg 88)
- Protective Cover #195 142 (pg 91)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.



Recommended aluminum solution: XR-Aluma-Pro push-pull gun (see pages 11 and 29).

See Aluminum Solutions comparison chart on page 14.

Model/Stock Number Millermatic 350P (#907 300) 200/230/460 V Millermatic 350P/ Aluma-Pro System (see below for contents) (#907 379) 200/230/460 V

	Input Power	Amperage Range	Rated Output				Output, 575 V			Wire Feed Speed	Wire Type and Diameter	Dimensions	Net Weight
I	Three- Phase	25-400	300 A at 32 VDC, 60% Duty Cycle	34	30	15	12	11.6	11.5	MIG Gun 50-700 IPM (1.3-17.8 m/min)	Solid Steel .023045 in (0.6 - 1.2 mm) Stainless .030045 in (0.8 - 1.2 mm) Aluminum .035047 in (0.9 - 1.2 mm)	H: 34 in (863 mm) W:19 in	181 lb (82 kg)
J	Single- Phase			69	61	30	24	13.1	11.2	Optional Spool Gun/ Push-Pull Gun 50-800 IPM (1.3-20 m/min)	Metal-Core .035052 in (0.9 - 1.3 mm) Flux Cored .030052 in (0.8 - 1.3 mm)	(483 mm) D: 41 in (1041 mm)	

Featured Accessories

Optional Aluminum System

Millermatic 350P/XR-Aluma-Pro™-A Push-Pull Gun Aluminum System **#907 379** 200/230/460 V

Aluminum welding package. Includes Millermatic 350P and 25 ft XR-Aluma-Pro™ push-pull gun. Allows usage of 12 inch rolls of aluminum.

Note: MIG gun not included (sold separately).





Wire Feeder Designed for Millermatics

Millermatic Reach (see page 10)

#907 438 25 ft (7.6 m) cable assembly Extend your Millermatic work area up to 40 feet! No more moving the machine and pulling primary power cables around the shop. Or use as a dual feeder option! No more downtime changing spools and drive rolls. For use with Millermatic 212 Auto-Set, 251, 252 and 350P.

Note: For use with MIG guns only (sold separately).







AlumaFeed[™] Synergic Aluminum Welding System

See Literature No. DC/34

The XR-AlumaFeed[™] and AlumaPower[™] 350 MPa combine for a synergic system that simplifies and improves MIG and Pulsed MIG aluminum welding applications.



AlumaFeed Synergic Aluminum Welding System with 25 ft XR-Aluma-Pro gun shown. Also available with XR-Pistol Grip gun.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity. Achieve "stacked dimes" without gun manipulation.



Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

Synergic "one-knob" control makes adjustments easy. Set the wire feed speed control on the gun and the system handles the rest.



Synergic Pulsed MIG provides communication between the power source, feeder and gun. As wire speed increases/ decreases, the pulse parameters also increase/decrease to match the right amount of power needed.

Built-in aluminum Pulsed MIG programs for simplicity and improved puddle control. Pulsed welding virtually eliminates burnthrough and warping issues on thinner materials.

Note: See Aluminum Solutions comparison chart on page 14.
*More system packages are available—see our Web site or your local distributor.
Packages include gun and feeder drive rolls and consumables to run .035-3/64 in
(0.9-1.2 mm) wire. 1/16 inch consumables not included—order separately at right.

Weld Cross Section





Hot Start™ allows operator to begin and end welds with ease and confidence. Eliminates incomplete fusion at the beginning of a weld, a common issue with aluminum welding. Crater gradually decreases weld current at the end of a weld to eliminate crater defects. Adjustable pre- and post-flow rates ensure that the puddle always has adequate gas coverage.

Synchronized, true push-pull wire feed system for precise wire feeding and arc performance.

Parameter and system locks enhance quality assurance and protect weld consistency.

Trigger schedule select allows operator to change between two sets of weld parameters.



Allows for **any** input voltage hookup (208–575 V) with no manual linking.



Heavy Industrial (CV DC 3 1

Processes

- MIG (GMAW)
- Pulsed MIG (GMAW-P)

Comes Complete With

- XR-AlumaFeed push-pull feeder
 AlumaPayer 250 MPs payers
- AlumaPower 350 MPa power source
- XR-Aluma-Pro™ or XR™-Pistol Grip push-pull welding guns (air- or water-cooled)
- .035 and 3/64 in (0.9 and 1.2 mm) contact tips, drive roll and liners for guns
- .035 and 3/64 in (0.9 and 1.2 mm) drive rolls for wire feeder, 3/64 (1.2 mm) installed

Note: All AlumaFeed systems come setup out of the box to run 3/64 in wire.

MIGRunner™ Package Includes Above Plus

- MIGRunner[™] Cart
- Industrial MIG 4/0 Kit with Dinse Connector (see contents below)

Most Popular Accessories

MIGRunner™ Cart #195 445 (pg 88)
 Easily maneuverable with small footprint and a cylinder rack low enough that you do not have to lift bottles.



- Industrial MIG 4/0 Kit with Dinse Connector #300 405 (pg 91) Includes Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with Dinse connector on one end and a lug on the other, and 15 ft (4.6 m) work cable with Dinse connector on one end and 600-amp C-clamp.
- Extension Cables (pg 96) 25 ft (7.6 m) #247 831 025 50 ft (15 m) #247 831 050 80 ft (24.4 m) #247 831 080
- 1/16 Inch (1.6 mm) Liner and Wire Kit #230 708

Model	Stock Number	Input Pow	Input Welding Ver Circuit Rating	Wire Feed Spec	Wire Diameter Speed Capacity			rimum Spool Capacity	Wire Feeder Dimensions	Wire Fee Net Weig			
AlumaFeed Synergic Aluminum Welding System*	(#951 147) w/25-ft, air-cooled XR-Aluma-Pro gun (#951 148) w/25-ft, water-cooled XR-Aluma-Pro gun (#951 149) w/30-ft, air-cooled XR-Pistol Grip gun (#951 150) w/30-ft, water-cooled XR-Pistol Grip gun (#951 151) MIGRunner w/25-ft air-cooled Aluma-Pro (#951 152) MIGRunner w/25-ft water-cooled Aluma-Pro	24 VAC, 5 50/60 Hz	A, 400 A at 100% Duty Cycle System duty cycle is limited to gun rating.	70-780 IPM (1.8-22.2 m/min)		.035062 in (0.9 - 1.6 mm) Wire kit #230 708 required to run 1/16 in (1.6 mm) wire.		12 in (305 mm)		H: 16 in (406 mm) W: 9½ in (241 mm) D: 21¼ in (540 mm)	42.5 lb (19.2 kg))	
XR-AlumaFeed Wire Feeder only	(#300 509) Note: Feeder is 14-pin compliant, but only operates synergicly with an MPa power source.												
Model	Stock Number		Amperage/ Voltage Ranges	Rated Output at 60% Duty Cycle				l Load 0 460 V		60 Hz KVA KW	Dimensions	Net Weig	jht
AlumaPower 350 MPa Power	(#907 420) Note: Power source is MIG and Pulsed MIG aluminum-only machine.		CC Mode: 5 – 425 A CV Mode: 10 – 38 V	350 A at 34 VDC	40.4	36.1	20.6	17.8	14.1	14.2 13.6	H: 17 in (432 mn W: 12½ in (318 r	nm) (36.3	
Source only		- 3 -	CC Mode: 5 – 425 A	300 A at 32 VDC	60.8	54.6	29.7	24.5	19.9	11.7 11.2	D: 24 in (610 mm)	



Choose the Right Industrial Aluminum MIG Solution



Millermatic 350P Aluminum System shown with XR-Aluma-Pro gun (pg 12).



AlumaFeed Synergic Aluminum System shown with XR-Aluma-Pro gun (pg 13).



Invision MPa Plus System shown with dual feeder Stationary Package (pg 18).

	Millermatic® 350P	AlumaFeed™ Synergic Aluminum System	Invision™ MPa Plus System
	Cost-effective light-industrial all-in-one MIG/Pulsed MIG solution with easy-to-use interface for aluminum and steel wire welding on material up to 1/2-in thick. Features built-in running gear for mobility.	Dedicated industrial-fabrication aluminum-welding solution with advanced welding features that can handle larger weldments. Its lightweight push-pull feeder can easily be carried up to 100 ft from the power source.	Versatile industrial advanced system for large, high-duty-cycle aluminum and steel weldments. Features push and/or push-pull benchtop feeder for easy switchover between solid, aluminum and tubular wires.
Power Source	Millermatic 350P (All-In-One)	AlumaPower™ 350 MPa	Invision 352 MPa
Feeder	All-In-One — add optional Millermatic Reach to create dual-wire feeder (pg 10)	Single-Wire XR-AlumaFeed — portable feeder can be carried up to 100 feet from power source	Single- or Dual-Wire 74 MPa Plus — stationary feeders can be mounted up to 100 feet from power source
Input Voltage	1- or 3-Phase	1- or 3-Phase	1- or 3-Phase
Rated Output	300 A at 60% Duty Cycle	350 A at 60% Duty Cycle	350 A at 60% Duty Cycle
Primary Connection	Auto-Link®— Automatically links the power source to primary voltage being applied. Auto-link is used to link to 208 or 230 V and manually moving a link board is required to link to 460 V.	Auto-Line™ — Allows for any primary input voltage (208 – 575 V, single- or three-phase, 50 or 60 hertz) with no manual linking. Also adjust for voltage spikes within the entire range.	Auto-Line™ — Allows for any primary input voltage (208 – 575 V, single- or three-phase, 50 or 60 hertz) with no manual linking. Also adjust for voltage spikes within the entire range.
Aluminum Wire Diameters	.035 – 3/64 in (0.9 – 1.2 mm)	.035-1/16 in (0.9-1.6 mm)	.035-1/16 in (0.9-1.6 mm)
Gun Capability	XR-Aluma-Pro™, XR™-Pistol or standard MIG Gun	XR-Aluma-Pro™ or XR™-Pistol	XR-Aluma-Pro™ Plus or standard MIG Gun
MIG Modes			
Profile Pulse™	_	Yes — achieve a "stacked dime" appearance quickly and easily without gun manipulation	Yes — achieve a "stacked dime" appearance quickly and easily without gun manipulation
Synergic Pulsed MIG	Yes —"one-knob" control, only need to change wire feed speed to weld different material thicknesses	Yes —"one-knob" control, only need to change wire feed speed to weld different material thicknesses	Yes — "one-knob" control, only need to change wire feed speed to weld different material thicknesses
MIG	Conventional MIG — modes for aluminum, steel and other wires	Spray Transfer MIG — for aluminum wires	Conventional MIG — modes for aluminum, steel and other wires
Features			
Built-In Pulsed Programs	Aluminum, steel and stainless	Aluminum	Aluminum, steel, stainless and others
Portability	Built-in running gear with cylinder rack— easily maneuverable from area to area	Lightweight, portable feeder with handle —can be carried up to 100 feet from power source	Stationary feeder — can be mounted up to 100 feet from power source
Trigger Hold	_	Yes —reduces operator fatigue from holding trigger	Yes — reduces operator fatigue from holding trigger
Trigger Dual Schedule		Yes — allows operator to switch between two preset weld conditions by pumping the trigger	Yes — allows operator to switch between two preset weld conditions by pumping the trigger
Program Locks	-	Yes — prevents unintended changes to the welding program weld parameters	Yes — prevents unintended changes to the welding program weld parameters
Flow Meter	-	Yes — allows flow to be set at feeder even when gas supply is a long distance away	-



MIG Packages for Demanding Industrial Applications

OPTIMIZED GOOD **BETTER BEST**











Delta-Fab/24A Deltaweld/S-74D Invision/S-74D

Power S	Source			300 Amp				450 Amp		650 Amp		
Welding Perforn	nance	CP-302 (Pg 16)	Delta-Fab™ (Pg 16)	Deltaweld [®] 302 (Pg 17)	Invision™ 352 MPa (Pg 18)	Axcess® 300 (Pg 20)	Deltaweld [®] 452 (Pg 17)	Invision™ 456P/MP (Pg 19)	Axcess® 450 (Pg 20)	Deltaweld [®] 652 (Pg 17)	Axcess® 675 (Pg 20)	
	Mild Steel	•	•	•	•	•	•	•	•	•	•	
Material	Stainless Steel	O		•	•	•		•	•		•	
	Aluminum		•	O	•	•	O	•	•	0	•	
	Gauge (.020 – .125)	•	•	•	•	•	•	•	•	•	•	
Material	Sheet (.125 – .375)	•	•	•	•	•	•	•	•	•	•	
Thickness	Plate (.375–1 in)	•	•	•	•	•	•	•	•	•	•	
	Plate (1+ in)						•	•	•	•	•	
	.030	•	•		•			•				
	.035	•	•	•	•	•	•	•	•	•	•	
	.045		•	0				•	•	•	•	
Wire Size	.052			0		O		•	•		•	
	1/16								•			
	5/64											
	3/32									•	•	
	Short Circuit	***	**	**	***	***	**	***	***	**	***	
	Pulsed Spray				****	***		*	***		***	
Process	Accu-Pulse®					***			***		***	
	RMD™					Optional ***			Optional ****		Optional ***	
	CAC-A				1/4"		1/4"	5/16"	1/4"	3/8"	3/8"	

ICON KEY

CAPABILITY: Opening Designed for Capable of

PROCESS QUALITY: ★ Good ★★ Better ★★★ Best ★★★★ Optimized

Note: All machines listed are designed for MIG spray transfer and Flux Cored welding.

CP-302

See Literature No. DC/13.0

Delivers dependable performance and productivity in more semiautomatic applications. Combined with 22A wire feeder it makes this a "Good!" light to medium industrial solution.







Stationary Package

Build your own system at MillerWelds.com/equiptoweld (see pg 19) or see package options below.





MIGRunner™ Package

Adjustable weld stabilizer (high-low inductance) provides the flexibility to produce the optimal arc characteristics.

Solid-state weld contactor provides longevity to match the ultra-durable and reliable reputation of the CP Series.

Presettable welding voltage allows you to easily set weld output before welding.

Power efficiency gives exceptional value and return on your investment.

Large analog voltmeter and ammeter for easy viewing.

CV DC 3 Industrial

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Most Popular Accessories

- 22A and 24A Wire Feeders (pg 30)
- 70 Series Wire Feeders (pg 30)
- Standard Running Gear #042 886 (pg 88)
- Standard Cylinder Rack #042 887 (pg 88)



- Industrial MIG 4/0 Kit #300 390 (pq 91)
- Bernard® and Tregaskiss™ MIG Guns When purchasing components separately please see your Miller distributor or visit MillerWelds.com/equiptoweld for other popular Miller options and accessories.

*Dimensions and weight are for power source only — includes lift eve and strain relief.

Stock Number

(#903 786) 200/230/460 V, Machine only (#903 521) 575 V, Machine only

(#951 231) 200/230/460 V, Stationary Pkg

(#951 230) 200/230/460 V. MIGRunner Pkg

		Amps Input at Rated Output, 60 Hz								Net
Voltage Range	Rated Output	200 V	230 V	460 V	575	KVA	KW	Open-Circuit Voltage	Dimensions*	Weight*
14 – 44 V	300 A at 32 V, 100% Duty Cycle	38	33	16.5	13	13.1	12.3	14-44	H: 30 in (762 mm) W: 23 in (585 mm) D: 30 ¹ / ₂ in (775 mm)	332 lb (151 kg)

Delta-Fab System See Literature No. DC/15

375 amps, excellent arc performance, and a 24A wire feeder with remote voltage control make this a "Better!" system solution for light and medium industrial applications.



MIGRunner™ Package

Material specific output studs provide the flexibility to produce the optimal arc characteristics for aluminum. stainless steel and all other materials.

Solid-state weld contactor provides longevity to match the ultra-durable and reliable reputation of the Delta-Fab.

Line voltage compensation keeps welding parameters constant even when input voltages change ±10%. Eliminates need to change welding parameters throughout the day.

Thermal overload protection automatically shuts down the system to prevent high repair costs.

Large analog volt and ammeters for easy viewing. 115 VAC duplex receptacle provides 15 amps of auxiliary power.

Auto Remote Sense™ automatically selects remote control requirements through the 14-pin receptacle. Eliminates switches and confusion for the operator.

Remote voltage control is standard. Parameter adjustments can be made in weld cell or at a remote location.

Industrial

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Most Popular Accessories

- Standard Running Gear #042 886
- Standard Cylinder Rack #042 887 (pg 88)



- Industrial MIG 4/0 Kit #300 390 (pg 91)
- Extension Cables (pg 96)
- Bernard[®] and Tregaskiss[™] MIG Guns When purchasing components separately please see your Miller distributor or visit MillerWelds.com/equiptoweld for other popular Miller options and accessories.

*Dimensions and weight are for power source only—
includes lift eye and strain relief.

			Amps Input at Rated Load Output, 60 Hz, 3-Phase							
Model/Stock Number		Voltage Range	Rated Output	230 V	460 V	575 V	KVA	KW	Dimensions*	Net Weight*
Delta-Fab System (#951 304) 230, Delta-Fab System (#951 233) 230, Delta-Fab System (#951 232) 230,	10 – 45	375 A at 35 VDC, 100% Duty Cycle	69	34.5	27.5	27.5	17.5	H: 30 in (762 mm) W: 23 in (585 mm) D: 30 ¹ / ₂ in (775 mm)	374 lb (180 kg)	

Wire Feeder	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
24A (Includes .035/.045 drive rolls)	24 VAC, 7 A, 50/60 Hz	75-750 IPM (1.9-19 m/min)	.023-3/32 in (0.6-2.4 mm)	60 lb (27 kg) coil	H: 11 in (279 mm) W: 10 ³ / ₄ in (273 mm) D: 23 ¹ / ₂ in (597 mm)	40 lb (18 kg)







Deltaweld Series See Literature No. DC/16.2

Rock solid reliability, exceptional value and power efficient operation make this the "Better!" MIG solution for the most demanding industrial manufacturing applications. Combined with the 70 Series wire feeder this system is the workhorse of the industrial market.

Build your own system at MillerWelds.com/equiptoweld (see pg 19) or see package options below.





Deltaweld (see stock numbers below) Build your own system at MillerWelds.com/equiptoweld.

Deltaweld models are available in 300, 450 and 650 amps.

Line voltage compensation keeps welding parameters constant even when input voltages change ±10%. Eliminates need to change welding parameters throughout the day.

Material-specific output studs provide the flexibility to produce optimal arc characteristics for aluminum, stainless steel and all other materials.

Unique **Fan-On-Demand**[™] cooling system operates only when needed. Reduces excess noise and contaminants drawn into the machine.

Thermal overload protection automatically shuts down the system to prevent high repair costs.

Remote control capability allows operators fine tuning capability at an extended distance.

15 amp, 115 VAC duplex receptacle for operating auxiliary tools.

Digital meters for presetting or monitoring welding voltage or amperage for more precise control.

Power efficient for exceptional value and return on your investment.



Deltaweld Stationary Package (see stock numbers below) Stationary display without running gear/cylinder rack.

Comes complete with:

- · Deltaweld power source
- S-74D wire feeder with drive rolls
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit (see listing at right for kit contents)

*Dimensions and weight are for power source only — includes lift eye and strain relief.



Deltaweld MIGRunner™ Package (see stock numbers below) MIGRunner system with factory-installed running gear/ cylinder rack.

Comes complete with everything in Stationary Package plus:

• Factory-installed running gear/cylinder rack

Industrial | 302 model Hvy Industrial • 452/652 models



Processes

- MIG (GMAW)
- Flux Cored (FCAW)
- · Air Carbon Arc Cutting and Gouging (CAC-A) (452: 1/4 in carbons) (652: 3/8 in carbons)

Most Popular Accessories

- 70 Series Wire Feeders (pg 30)
- Standard Running Gear #042 886 (pg 88)
- Standard Cylinder Rack #042 887 (pg 88)



• Industrial MIG 4/0 Kit #300 390

Includes Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.

- Remote On/Off Control #242 197 025 (pg 94)
- Extension Cables (pg 96)
- Air Filter Kit #042 939
- Bernard[®] and Tregaskiss[™] MIG Guns When purchasing components separately please see your Miller distributor or visit MillerWelds.com/equiptoweld for other popular Miller options and accessories.

Model Deltaweld 302	Stock Number (#903 376) 200-208/230/460 V, Machine only (#903 392) 230/460/575 V, Machine only (#951 235) 200-208/230/460 V, Stationary Pkg (#951 299) 230/460/575 V, Stationary Pkg (#951 234) 200-208/230/460 V, MIGRunner Pkg (#951 300) 230/460/575 V, MIGRunner Pkg	Voltage Range 10-32	Recommended Welding Range 15-32 V	Rated Output 300 A at 32 VDC, 100% Duty Cycle		Input at 230 V 42					Max. Open- Circuit Voltage 42 VDC	Dimensions* H: 30 in (762 mm) W: 23 in (585 mm) D: 30½ in (775 mm)	Net Weight* 323 lb (147 kg)
Deltaweld 452	(#903 377) 200-208/230/460 V, Machine only (#903 394) 230/460/575 V, Machine only (#951 237) 200-208/230/460 V, Stationary Pkg (#951 301) 230/460/575 V, Stationary Pkg (#951 236) 200-208/230/460 V, MIGRunner Pkg (#951 302) 230/460/575 V, MIGRunner Pkg	10-38	15-38 V	450 A at 38 VDC, 100% Duty Cycle	72	63	32	25	25.1	21.1	48 VDC	H: 30 in (762 mm) W: 23 in (585 mm) D: 38 in (966 mm)	384 lb (174 kg)
Deltaweld 652	(#903 396) 230/460/575 V, Machine only (#951 239) 230/460/575 V, Stationary Pkg (#951 238) 230/460/575 V, MIGRunner Pkg	10-44	15-44 V	650 A at 44 VDC, 100% Duty Cycle	_	96	48	38	38.2	34.2	54 VDC	H: 30 in (762 mm) W: 23 in (585 mm) D: 38 in (966 mm)	472 lb (214 kg)

Invision™ MPa Plus System see Literature No. DC/23.6

Features Alumination™ to provide the versatility of extended reach push-pull aluminum and includes Pulsed MIG programs for many other wires, providing the "Best!" solution for all vour MIG welding needs.

Built-in MIG and Pulsed MIG programs automatically set the optimal parameters for a wide variety of wires providing immediate productivity.

Alumination™ allows use of extended reach push-pull gun for consistent, dependable aluminum wire feeding.



Allows for **any** input voltage hookup (208–575 V) with no manual linking.

Robust and stable arc, even at short lengths, provides improved control with reduced heat input and the ability to weld a wider range of material thicknesses.

Build your own system at MillerWelds.com/equiptoweld (see pg 19) or see package options below.



Invision 352 MPa (see stock numbers below) Build your own system at MillerWelds.com/equiptoweld.





Invision MPa Plus Stationary Package (see stock numbers below)

Stationary display without running gear/cylinder rack.

Comes complete with:

- Invision 352 MPa power source with or without auxiliary power
- Single or dual 74 MPa Plus wire feeder with drive rolls
- 25 ft XR-Aluma-Pro™ Plus push-pull gun for aluminum
- 15 ft Bernard® Q400 Gun (2 included w/dual feeder pkgs)
- Industrial MIG 4/0 Kit with Dinse Connector (see page 86 for kit contents)
- Coolmate[™] 3 for single feeders or Coolmate[™] V3 for dual feeders (water-cooled packages only)

Optimized arc control from start to finish is achieved using communication between Invision 352 MPa power source and 74 MPa Plus feeder.

Synergic Pulsed MIG provides communication between the power source, feeder and gun. As wire speed increases/decreases, the pulse parameters also increase/ decrease to match the right amount of power needed.

Profile Pulse™ provides TIG appearance with MIG

simplicity and productivity.

Achieve "stacked dimes" without gun manipulation.

Easy to set up. Select wire diameter, wire type and gas being used, set your wire speed and strike an arc.



Invision MPa Plus MIGRunner™ Package (see stock numbers below) MIGRunner system with running gear/cylinder rack.

Comes complete with everything in the Stationary Package plus:

• Running gear/cylinder rack (MIGRunner Cart for single feeders or Running Gear Cylinder Rack for dual feeders)

Heavv Industrial

Processes

- MIG (GMAW) Flux Cored (FCAW)
- Pulsed MIG (GMAW-P)
- · Air Carbon Arc Cutting and Gouging (CAC-A) (1/4 in carbons)

Most Popular Accessories

- MIGRunner™ Cart (Single Feeders only) #195 445 (pg 88)
- Running Gear Cylinder Rack #300 408 (pg 88)
- Industrial MIG 4/0 Kit with Dinse Connector #300 405 (pg 91)
- Extension Cables (pg 96) 25 ft (7.6 m) #247 831 025 50 ft (15 m) #247 831 050 80 ft (24.4 m) #247 831 080

74 MPa Plus Wire Feeders (pg 31)



Dual feeder shown.

S-74 MPa Plus (single) #951 291

- Synergic Pulsed MIG benefits when used with Invision 352 MPa.
- Wire speed of 50-780 IPM.
- Program locks allow operator to maintain proper weld parameters.
- · Trigger hold reduces fatigue.

D-74 MPa Plus (dual) #951 292

All of the features listed above plus: · Cover all your wire needs with one

feeder. Saves setup and changeover time by allowing two different wires to be ready at the same time.

Note: Feeders include Bernard Q-Guns (one for S-74 models and two for D-74 models. Feeders are 14-pin compliant, but only operate synergicly with an MPa power source. For more information on 74 MPa Plus feeders, see Lit. No. M/3.0.

XR-Aluma-Pro Plus Push-Pull Guns

#300 000 001 15 ft air-cooled #300 001 001 25 ft air-cooled 35 ft air-cooled #300 264 001 15 ft water-cooled #300 003 001 25 ft water-cooled #300 004 001 35 ft water-cooled #300 265 001 Dedicated our works with MPa Plus feeders using tachometer feedback to coordinate wire feed speed of the gun and the feeder.

When purchasing components separately please see your Miller distributor or visit MillerWelds.com/equiptoweld for other popular Miller options and accessories.



Note: See Aluminum Solutions comparison chart on page 14. *Additional packages are available, see our Web site or literature sheets. **Duty cycle rating below achieved with 6 gauge input power cord (8 gauge cord supplied with unit). ***Dimensions/weight for power source only.

Stock Number*	Water-Cooled Pkgs with 25 ft Guns	Air-Cooled Pkgs with 25 ft Guns	Input Power	Amperage/ Voltage Ranges	Rated Output					output, 6 575 V		Max. Open- Circuit Voltage	Dimensions***	Net Weight***
(#907 431) Machine only (#907 431 001) Machine only w/Auxiliary Power	Stationary Packages (#951 377) w/Aux Pwr and Single Feeder (#951 378) w/Aux Pwr and Dual Feeder (#951 379) w/Aux Pwr and Single Feeder (#951 380) w/Aux Pwr and Dual Feeder	Stationary Packages (#951 283) w/Single Feeder (#951 285) w/Dual Feeder MIGRunner Packages (#951 287) w/Single Feeder (#951 289) w/Dual Feeder	Three- Phase Single- Phase	CC Mode: 5-425 A CV Mode: 10-38 V	350 A at 34 VDC, 60% Duty Cycle 300 A at 32 VDC, 60% Duty Cycle**	60.8	54.6	29.7	25.4		14.2	75 VDC	H: 17 in (432 mm) W: 12½ in (318 mm) D: 24 in (610 mm)	80 lb (36.3 kg)

Invision 456MP and 456P

See Literature No. DC/23 and No. DC/20

Inverter design with variable inductance control provides the "Best!" industrial MIG welding performance for manufacturing applications.



*Additional models are available, see our Web site or literature sheets.

**Dimensions and weight are for power source only.

Variable electronic inductance helps minimize spatter and optimize weld bead profile.

Dual digital meters for quick and easy viewing.

14-pin select remote control allows "plug and play" convenience. Makes set-up time quicker.

Fan-On-Demand™ improves power efficiency and noise reduction.

Wind Tunnel Technology™ protects electrical components and PC boards from contamination, significantly improving reliability.

MP Model Additional Features

Built-in Pulsed MIG capabilities eliminates pendants and cables that could potentially get damaged or lost.

Microprocessor-based technology allows process parameter storage to be retained between power down, power up, and also between program changes.

Heavy Industrial

CCV CV DC 3 Invision 456P

Processes

- MIG (GMAW)
- Flux Cored (FCAW)
- Pulsed MIG (GMAW-P) w/456MP (456P requires optional control)
- Stick (SMAW) with 456MP
- Air Carbon Arc Cutting and Gouging (CAC-A) (5/16 in carbons)

Most Popular Accessories

- 70 Series Wire Feeders (pg 30)
- Running Gear Cylinder Rack #300 408 (pg 88)



- Industrial MIG 4/0 Kit #300 390 (pg 91)
- Extension Cables (pg 96)

When purchasing components separately please see your Miller distributor or visit **MillerWelds.com/equiptoweld** for other popular Miller options and accessories.

Model*	Stock Number	Amperage/ Voltage Range	Rated Output			Rated Loa ages and C 575 V			Max. Open- Circuit Voltage	Dimensions**	Net Weight**
Invision 456MP	(#903 725) 230/460 V, Machine only (#907 056) 575 V, Machine only (#951 243) 230/460 V, Stationary Pkg (#951 242) 230/460 V, MIGRunner Pkg	CC Mode: 5-600 A Stick CV Mode: 10-38 V	450 A at 38 VDC, 100% Duty Cycle	50.8	27.8	24.4	21.2	19.2	95 VDC	H: 17 in (432 mm) W: 14½ in (368 mm) D: 26 in (660 mm)	118 lb (53.5 kg)
Invision 456P	(#903 505) 230/460 V, Machine only (#903 546) 575 V, Machine only (#951 245) 230/460 V, Stationary Pkg (#951 244) 230/460 V, MIGRunner Pkg	CV Mode: 10 – 38 V									



A NEW ONLINE TOOL TO BUILD YOUR OWN INDUSTRIAL SYSTEM

Point & Click to Create a Complete Welding System!

- Fast, easy and accurate system configuration. Build your own system customized for your unique needs.
- A smart system that only displays options that work together.
- Customization to fit your needs. Choose the power source, feeder, MIG gun (Bernard, Tregaskiss, or Miller), drive rolls, and contact tips. All Neccessories™ included—primary cables, secondary cables, quick connectors, work clamps, regulators, gas hose and more.
- List prices to build your quote are available 24/7.
- Customize your feeder components. Select the gun, contact tips, and drive rolls included with your feeder.
- Customize your secondary cables with the terminations of your choice. Cables are factory assembled for increased reliability.
- Fast and convenient delivery. Standard items typically ship the same day, and most custom orders ship within 48 hours.

Build your system at MillerWelds.com/equiptoweld

Axcess Systems See Literature No. DC/8.0

Optimize your industrial MIG welding system with digital control capability and exceptional MultiMIG® performance. A dedicated, menu-driven wire feeder provides a true synergic solution.

Build your own system at MillerWelds.com/equiptoweld (see pg 19) or see package options below.





Axcess (see stock numbers below) Build your own system at MillerWelds.com/equiptoweld.

Allows for any input voltage hookup (208-575 V) with no manual linking.

Assures rock-solid, consistent output on fluctuating primary lines.

RS-232 serial port provides access to data transfer and optional program downloads from Web at MillerWelds.com/AMS/axcess.

Axcess four-drive-roll wire drive feeder is combined with operator interface leaving no controls back at the power source.

MIG welding programs include **Accu-Pulse**,® **Accu-Curve**,™ standard or adaptive pulse, conventional MIG and metal core programs. Note: Look for high-speed video clips of Accu-Pulse®, Accu-Curve™, Accu-Speed™ and Front Panel Simulator at MillerWelds.com/AMS/axcess.

Accu-Pulse® MIG process delivers precise control of the arc even over tack welds and in tight corners.

SureStart® technology provides consistent arc starts by precisely controlling power levels for specific wire and gas combinations.



Axcess Stationary Package (only available with 300 and 450 models, see stock numbers below) Stationary display without running gear/cylinder rack.

Comes complete with:

- · Axcess power source
- · Axcess wire feeder with drive rolls
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit (see listing at right for kit contents)
- *Additional models are available, see our Web site or literature sheets.
- **Dimensions and weight are for power source only.

Axcess MIGRunner™ Package (only available with 300 and 450 models, see stock numbers below) MIGRunner system with running gear/cylinder rack.

Comes complete with everything in the Stationary Package plus:

· Running gear/cylinder rack

Industrial - 300 model Hvy Industrial • 450/675 models



Processes Multi-MIG®

- Accu-Pulse™ MIG (GMAW-P)
- Accu-Curve™
- Accu-Speed[™] (optional)
- Pulsed MIG (GMAW-P)
- Metal Core
- MIG (GMAW)
- RMD™ Regulated Metal Deposition (GMAW-SCT) (optional)
- Carbon Arc Gouging (CAC-A) can also be activated

Most Popular Axcess-ories

- Accu-Speed[™] (pg 23) for Palm #300 719 for PC #300 720
- RMD™ (Regulated Metal Deposition) (pg 23) for Palm #195 252 for PC #300 721
- Axcess® File Management Software for PC #300 529
- WaveWriter™ File Management Software (consult factory)
- Feeder Cart #142 382 (pg 87)
- Running Gear Cylinder Rack (Axcess 300 and 450 only) #300 408 (pg 88)



- Industrial MIG 4/0 Kit #300 390 (pg 91)
- Includes Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.
- Aluminum Gun Kits for pushing aluminum wire (pg 92) .035, 10 ft (3 m) #300 541 .047, 12 ft (3.7 m) #300 542 1/16, 12 ft (3.7 m) #300 543 Kits include .035, .047 or 1/16 in drive rolls and 10 or 12 ft Bernard® Q-Gun™

When purchasing components separately please see your Miller distributor or visit MillerWelds.com/equiptoweld for other popular Miller options and accessories.

Model*	Stock Number	Amperage/ Voltage Ranges	Three-Phase Rated Output		s Input a / 230 V					KW	Max. Open- Circuit Voltage	Dimensions**	Net Weight**
Axcess 300	(#907 150) Machine only (#951 227) Stationary Pkg (#951 226) MIGRunner Pkg	5-400 A 10-44 V	300 A at 29 VDC, 60% Duty Cycle	33	29.7	16.9	14.6	11.6	11.7	11.2	80 VDC	300 H: 23 in (584 mm) 450 H: 31 in (787 mm) 675 H: 39 in (991 mm)	116 lb (52.6 kg)
Axcess 450	(#907 152) Machine only (#951 229) Stationary Pkg (#951 228) MIGRunner Pkg	5-600 A 10-44 V	450 A at 36.5 VDC, 100% Duty Cycle	_	60	33.7	28.8	22.8	23.8	22.9	80 VDC	W: 17 in (432 mm) D: 22-1/2 in (572 mm)	163 lb (73.9 kg)
Axcess 675	(#907 154) Machine only	5-900 A 10-44 V	675 A at 38 VDC, 100% Duty Cycle	_	89.7	_	43.7	34.8	35.7	34.4	80 VDC		208 lb (94.3 kg)







Wire Feeding Options

Customize your industrial MIG welding system with the wire feeding options listed below.

Axcess® Feeders

Single-Wire Model #195 182 **Dual-Wire Model** #195 325

DeviceNet Interconnecting #242 209 005 5 ft (1.5 m) Feeder Control Cable* #242 209 010 10 ft (3 m) #242 209 025 25 ft (7.6 m) (One required per machine) #242 209 050 50 ft (15.2 m)

*Custom lengths available in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.



Axcess® ROI Swingarc™ Boom-Mounted Feeders

#951 383 8 ft (2.4 m) Single-Wire Models #951 384 12 ft (3.7 m) **#951 385** 16 ft (4.9 m)

Dual-Wire Models #951 386 8 ft (2.4 m) #951 387 12 ft (3.7 m)

#951 388 16 ft (4.9 m)

Swingarc boom-mounted semiautomatic wire feeders bring an extra dimension of flexibility and efficiency to high-production MIG welding stations. You get an effective solution that maximizes output, especially when dealing with large weldments and hard-to-reach places.





Axcess® ROI (Remote Operator Interface)



Single ROI #195 238 Dual ROI #195 433

ROI includes the operator interface and wire motor control packaged into a separate sheet metal enclosure allowing the power source, wire drive motor assembly and operator interface (ROI) to be located in three separate places. Does NOT include AA-40GB Wire Drive Motor Assembly, Motor Control Cable or DeviceNet Interconnecting Feeder Control Cable. These must be ordered separately (see below). Ideal for retrofitting existing booms (Miller and competitive brands).



Auto ROI back panel showing connection for input

and output signals.

Auto ROI #195 239

The Auto ROL is different from other ROI models in that it allows for control of simple automated equipment with two programmable contacts when used with semi-automatic Axcess AND E-Stop option. Used for fixed/hard automation applications. Includes 30 ft cable for wiring to other external devices.

Cables and Wire Feed Motors



Axcess Power Source

> **DeviceNet Interconnecting** Feeder Control Cable* **#242 209 005** 5 ft (1.5 m)

#242 209 010 10 ft (3 m) #242 209 025 25 ft (7.6 m) **#242 209 050** 50 ft (15.2 m)

Boom Retrofit **Applications**

Operator

Interface)





Feeder Base with Spool Support #195 369

Flexible Mounting Options

ROI (Remote

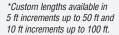
Motor Control Cable* #242 395 020 20 ft (6.1 m) #242 395 030 30 ft (9 m) #242 395 050 50 ft (15.2 m)

(Two cables required for Dual ROI.)

Gun (NOT included, must be ordered separately)

AA-40GB Wire Drive **Motor Assembly** #195 426 Left-Hand Drive **#195 515** Right-Hand Drive

(Two wire drive motor assemblies required for Dual ROI.)





UTOMATED

MANUFACTURING SYSTEMS



MillerWelds.com/AMS

Products shown in this section are more complex and may require Miller factory support at additional expense to assure the system and components needed are properly selected and installed. Consult the factory for ALL Automation and Robotic applications at 1-920-954-3813.

Auto-Axcess® Systems

For robotic automation — seamless integration of digital control technology combines inverter welding power source and robotic interface.



AA-40GB Wire Drive Motor Assembly with OCP (Over Current Protection) to protect against current surges. New design utilizes an improved sheet metal enclosure including printed circuit board. It features a threaded gas connection and a direct-panel-mounted, guarter-turn motor control cable connection that eliminates motion stress on the motor's power and tachometer feedback wires.

Allows for **any** input voltage hookup (208–575 V) with no

manual linking. Assures rock-solid, consistent output on fluctuating primary lines.

MIG welding programs include Accu-Pulse,® Accu-Curve.™ standard or adaptive pulse. conventional MIG and metal core programs.

Accu-Pulse® MIG process delivers precise control of the arc even over tack welds and in tight corners.

SureStart® technology provides consistent arc starts by precisely controlling power levels for specific wire and gas combinations.

Optional Axcess-able software:

Accu-Pulse[™] tandem (factory-installed only), Accu-Speed[™] for Palm or PC, RMD[™] (Regulated Metal Deposition) for Palm or PC. Axcess® File Management for PC, and WaveWriter™ File Management with Wave Shaping.

Axcess® Multi-MIG® Welding Process Capabilities

Process	Standard Spray	Pulsed Spray	Accu-Pulse® Accu-Curve™ Accu-Speed™ (Optional)	Standard Short Circuit	RMD™ Regulated Metal Deposition (Optional)
Weld Puddle Control	Flat/Horiz	ontal <i>l</i>	All Position Performand	e Thi	in Materials/Gap Filling

Note: Look for high-speed video clips of Accu-Pulse®. Accu-Curve™, Accu-Speed™ and Front Panel Simulator at MillerWelds.com/AMS/axcess.

*Order Wire Drive Motor Assembly and required length Motor Control Cable separately.

<u>CV</u> DC 🧝 **Processes**

Multi-MIG®

- Accu-Pulse® MIG (GMAW-P)
- Accu-Pulse® tandem (optional)
- Accu-Curve™
- Accu-Speed[™] (optional)
- Pulsed MIG (GMAW-P)
- Metal Core
- MIG (GMAW)
- RMD $\dot{}^{\text{™}}$ Regulated Metal Deposition (GMAW-SCT) (optional)

Required Wire Drive Motor Assembly/Motor Control Cable

- AA-40GB Wire Drive Motor (includes 50 ft volt-sense lead) Left-Hand Drive #195 426 Right-Hand Drive #195 515 (Order required Motor Control Cable separately)
- Motor Control Cable 20 ft (6.1 m) #242 395 020 30 ft (9 m) #242 395 030 50 ft (15.2 m) #242 395 050

Most Popular Axcess-ories

- Accu-Speed[™] (pg 23) for Palm #300 719 for PC #300 720
- RMD™ (Regulated Metal Deposition) (pg 23) for Palm #195 252
- for PC #300 721
- Axcess® File Management Software for PC #300 529
- WaveWriter™ File Management Software (consult factory)
- Coolant Flow Switch #195 461 (pg 86)
- Receptacle/Adapter Kits (One required per machine) ÀBB #194 793

Fanuc #194 791 Motoman #194 790 Panasonic #300 056 Universal #195 002

- Smart Adapter #300 012 allows automatic to be configured to function as semi-automatic
- Fanuc/Motoman Motor Bracket #300 013

Model	Stock Number*	Amperage/ Voltage Ranges	Three-Phase Rated Output					t, 50/60 575 V		KW	Max. Open- Circuit Voltage	Dimensions	Net Weight
Auto-Axcess 300	(#907 151) Base Power Source (#907 151-00-1) w/Accu-Speed Software (#907 151-01-1) w/RMD Process Software	5-400 A 10-44 V	300 A at 29 VDC, 60% Duty Cycle	33	29.7	16.9	14.6	11.6	11.7	11.2	80 VDC	300 H: 23 in (584 mm) 450 H: 31 in (787 mm) 675 H: 39 in (991 mm)	116 lb (52.6 kg)
Auto-Axcess 450	(#907 153) Base Power Source (#907 153-00-1) w/Accu-Speed Software (#907 153-01-1) w/RMD Process Software (#907 153-02-2) w/tandem Syncronization	5-600 A 10-44 V	450 A at 36.5 VDC, 100% Duty Cycle	_	60	33.7	28.8	22.8	23.8	22.9	80 VDC	675 H: 39 in (991 mm)	163 lb (73.9 kg)
Auto-Axcess 675	(#907 155) Base Power Source (#907 155-00-3) w/Accu-Speed Software (#907 155-02-1) w/tandem Syncronization	5 – 900 A 10 – 44 V	675 A at 38 VDC, 100% Duty Cycle	_	89.7	_	43.7	34.8	35.7	34.4	80 VDC		208 lb (94.3 kg)

AUTOMATED MANUFACTURINGSYSTEMS

W

Featured Welding Processes

Accu-Pulse® Standard on all Axcess models

The Accu-Pulse process allows for precise control of the pulse arc. Accu-Pulse provides optimum molten puddle control and has power to increase wire feed speeds and deposition 20 to 25% in many applications.

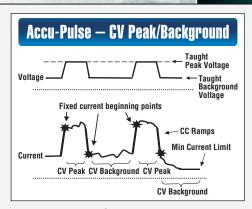
Accu-Pulse® tandem optional on all Auto-Axcess models

Miller technology synchronizes pulsing between two Auto-Axcess power supplies to achieve two stable, independent arcs in one torch. Each wire has its own power source, wire drive, and contact tip. Accu-Pulse tandem welding unites the arc characteristics of Accu-Pulse with the high deposition rates and travel speeds achievable with the tandem process.

See page 22 for power sources with optional Accu-Pulse tandem.

Accu-Curve™ *standard on all Axcess models*

Accu-Curve is a variation of the Accu-Pulse process. The transitions from peaks to background voltage are "curved". The curved transitions provide a "softer" feel without sacrificing the tight arc lengths that allow for better puddle control that have become the hallmark of the Accu-Pulse process.



Note: Accu-Curve can be added to existing Axcess or Auto-Axcess systems for FREE by updating code online at MillerWelds.com/AMS/axcess. Requires Palm handheld or PC to transfer code to Axcess.

Optional Software-Based Welding Processes

Accu-Speed™

Field #300 719 for Palm*

Field #300 720 for PC**

Accu-Speed is a variation of the Accu-Pulse process and was developed for the type of arcs needed in automated welding applications. Accu-Speed has a tighter driving arc that can be directed into the joint, yet still remains stable at the higher travel speeds used in automated welding. In general, Accu-Speed has lower average voltage and amperage when compared to Accu-Pulse which makes it ideal when welding out of position in the manual mode.

RMD™ (Regulated Metal Deposition)

Field #195 252 for Palm* Field #300 721 for PC**

The RMD (Regulated Metal Deposition) process is a precisely controlled short-circuit transfer. It is a method of detecting when the short is going to clear and then rapidly reacting to this data changing the current (amperage) levels. Features Proactive Dynamic Puddle Control.

Note: Serial # must be provided for field installation. Field kits include cable for connecting to Axcess, but require Palm handheld or PC version of File Manager. FREE 16-hour trial included with every new Axcess power supply. See page 22 for power sources with factory-installed software.

- *Required Palm handheld with data card slot is NOT included.
- **PC-based emulator and cable are NOT included.



PERFORMARC

BRINGING TOGETHER THE BEST OF BOTH WORLDS!

Miller Welding Automation combines top-tier Panasonic robotics and electronics with Miller's industry-leading welding products, services and support. It's a natural fit that brings together the resources of two global technology leaders. We offer a comprehensive array of both pre-integrated systems and standalone automated welding components.

Now you can approach the toughest production challenges of the future with your trusted welding partner—a one-stop resource with the real system intelligence it takes to deliver the performance and payback you're looking for. We'll guide your every step by evaluating your automation options, and recommending the system and integration partner that fits your needs.

Find out more at MillerWelds.com/automation



FEEDERS







MillerWelds.com/WireFeeders

	Product Guide	age	ass	MIG	MIG-P*	Flux Cored**	Portable	Power Source Required	ard	Wire T Flux Core Dual Shld		EII				
	Millermatic® Reach (MIG section)		_						H2	Dual Shid	Self Shid	(A)	Wire Diameters .023052 in (0.6-1.3 mm)	Special Features Portable, self-enclosed case, designed exclusively for Millermatics	Typical Applications Metal fab, maintenance/repair, farm/home	
	SuitCase® 8RC, SuitCase® 12RC	26 26	•	•	•		•	CV		•	•	•	8RC: .023-5/64 in (0.6-2.0 mm) 12RC: .023-5/64 in (0.6-2.0 mm)	Portable, self-enclosed case, remote control	Construction, field maintenance, site fabrication	
eed	22A	30			•			CV					.023-5/64 in (0.6-2.0 mm)	(2) Quick-change drive rolls	Manufacturing, fabrication	
-S	24A	30		•	•			CV	•				.023-3/32 in (0.6-2.4 mm)	(4) Quick-change drive rolls	Manufacturing, fabrication	
Constant-Speed	70 Series S/D/DX — Singles and Duals	30	•	•	•			CV		•	•		.023-1/8 in (0.6-3.2 mm) Low speed option recommended for 1/8 in wires	Four drive roll, adjustable weld control	Heavy and light manufacturing, fabrication	
	70 Series MPa Plus — Singles and Duals	31	•	•	•			CV		•	•		.035-3/32 in (0.9-2.4 mm)	Alumination allows push/pull gun. Optimized with Invision 352 MPa	Manufacturing requiring multiple wire types	
	70 Series Swingarc™— Singles and Duals	32		•	•			CV		•	•		.023-5/64 in (0.6-2.0 mm)	8, 12 and 16 ft booms, four drive roll, adjustable weld control	Heavy and light manufacturing, fabrication	
ensing	SuitCase [®] X-TREME™ 8VS	25	•	•			•	CC/CV		•	O CV**	•	.023-1/16 in (0.6-1.6 mm)	Lightweight, portable, 8 in diameter spool capacity	Shipbuilding, construction, site fabrication	
Volt-Sensing	SuitCase [®] X-TREME™ 12VS	25	•	•			•	CC/CV		•	• CV**		.023-5/64 in (0.6-2.0 mm)	Lightweight, portable, 12 in diameter spool capacity	Shipbuilding, construction, site fabrication	
	Spoolmate™ 100 Series	27					•	CV	•				.023035 in (0.6-0.9 mm)	Economical, 135 A	Light-duty aluminum fabrication	
	Spoolmate™ 200 Series	27	•	•				CV	•				.023035 in (0.6-0.9 mm)	Economical, 160 A	Light-duty aluminum fabrication	
_	Spoolmatic® 15A/30A	28		•	•)		CC/CV					.023-1/16 in (0.6-1.6 mm)	Portable, 4 in spool, 15 and 30 ft	Aluminum fabrication	
	XR [™] -Pistol 15A/30A	28		•	•)		CC/CV	•				.030-1/16 in (0.8-1.6 mm)	Push-pull system	Heavy aluminum fabrication	
Aluminum	XR [™] -Pistol 15W/30W	28)	•	CC/CV					.030-1/16 in (0.8-1.6 mm)	Push-pull system	Heavy aluminum fabrication	
¥	XR-Aluma-Pro™ A	29			•)	•	CC/CV	•				.030-1/16 in (0.8-1.6 mm)	High-amperage air-cooled gun	All aluminum fabrication needs	
	XR-Aluma-Pro™ W	29		•	•)	•	CC/CV	•				.030-1/16 in (0.8-1.6 mm)	High-amperage water-cooled gun	All aluminum fabrication needs	
	XR [™] -Controls	29		•	•)	•	CC/CV	•	•		•	.030-1/16 in (0.8-1.6 mm)	Push-pull system	Heavy aluminum fabrication	

PRODUCT KEY

CLASS: • Light Industrial • Industrial • Heavy Industrial CAPABILITY: • Designed for this process • Capable of this process

*Millermatic Reach requires Millermatic 350P. Other feeders require optional Optima control and a recommended inverter.

***Certain self-shielded wires require CV output. Miller recommends a CV power source whenever possible. For more detailed information, see individual specification sheets.









SuitCase® X-TREME™ 8VS and 12VS

See Literature No. M/6.41

Taking portable welding to the extreme—available in two sizes, these voltage-sensing feeders have every feature you will ever need.



Models **include** Bernard[®] Q300 MIG gun (8VS/12VS) with reversible dual size (.045 and 1/16 in) VK drive rolls

shown with Bernard® Q300.

or Dura-Flux Cored gun (12VS)
with reversible dual size (.068/.072 and 5/64 in) VK drive rolls!
For more options, visit MillerWelds.com/equiptoweld (see pg 19).

Smaller 8VS size is ergonomically sound, lightweight, and well balanced for ease of carrying to remote welding sites. Fits through a 14-inch manhole/manway.

Polypropylene case with built-in slide rails has door for changing wire with the feeder in a vertical position.

Potted and trayed main printed circuit board for the harshest environments adds exceptional reliability. Board has full-trigger isolation so a shorted gun trigger will not affect feeder operation.

Improved contactor for high-amperage, high duty cycle applications. Digital meters with SunVision™ technology can display voltage, wire feed speed, and also amperage if desired. Meters can be seen clearly even in direct sunlight. (8VS: meters are optional.)

Trigger hold, wire jog, and gas purge are located on front panel. (8VS: trigger hold is optional.)

Wider voltage range for small and large wires with no contactor chatter or arc outages.

Double-filtered gas valve helps keep dirt from clogging and affecting gas flow.

Excellent starts and superior arc performance for all types and sizes of wires whether using CV or CC power supply. (CV is recommended for best arc performance.)

Industrial 🔵 🚾 📭

Use with CC/CV, DC Power Sources

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Suggested Power Sources

- Dimension[™] Series (pg 49)
- XMT® Series (pg 50/51)
- Dimension[™] NT 450 (pg 53)
- Mark VI[™] (pg 56)
- Bobcat[™] (pg 60/62/63)
- Trailblazer® (pg 64/65)
- Big Blue® 300 Pro (pg 67)
- Big Blue® 400/500 (pg 70)

Suggested Guns

- Bernard® Q300 (GMAW)
- Bernard[®] Dura-Flux[™] (FCAW)
- Roughneck® (GMAW) (pg 92)
- Ironmate[™] FC-1260 (FCAW)
- Ironmate** FC-1260 (FCAW)
 (pg 92)

Most Popular Accessories

- 8VS Meter Kit #300 331 (pg 91)
- 8VS Trigger Hold #300 332
 Flavore star Kit. #200 249
- Flowmeter Kit #300 343

See your Miller distributor for other popular Miller options and accessories.

Model	Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
SuitCase X-TREME 8VS	(#951 181) w/Bernard® Q300 Gun (#951 182) w/Bernard® Q300 Gun and Meters (#951 183) w/Bernard® Q300 Gun, Meters and Trigger Hold	Operates on open-circuit voltage and arc voltage:	330 A at 60% Duty Cycle	50-780 IPM (1.3-19.8 m/min) Actual range in CC mode is	Solid Wire .023 – .062 in (0.6 – 1.6 mm) Flux Cored .030 – .062 in (0.8 – 1.6 mm)	8 in (203 mm), 14 lb (6.4 kg)	H: 12¾ in (324 mm) W: 7¼ in (184 mm) D: 18 in (457 mm)	28 lb (13 kg)
SuitCase X-TREME 12VS	(#951 184) w/Bernard® Q300 Gun (#951 185) w/Bernard® Dura-Flux™ Gun	14-48 VDC/ 110 Max. OCV	425 A at 60% Duty Cycle	dependent on arc voltage applied	Solid Wire .023-5/64 in (0.6-2.0 mm) Flux Cored .030-5/64 in (0.8-2.0 mm)	12 in (305 mm), 45 lb (20 kg)	H: 15½ in (394 mm) W: 9 in (229 mm) D: 21 in (533 mm)	35 lb (15.9 kg)

Miller SuitCase® Selection Chart

1. Not recommended for use with AC power sources. 2. When paired with CC power source, VS feeder will vary wire feed speed (WFS) to maintain voltage. As such, accuracy of parameters and deposition rates cannot be guaranteed. For critical welds, Miller recommends using CV power source.

Note: Use CV power source for best performance when wire welding. Also, set VS feeder to "CV mode" and welder to "CV or volt sense feeder mode" if applicable.

Application Requirements	SuitCase 8RC	SuitCase 12RC	SuitCase X-TREME 8VS	SuitCase X-TREME 12VS	Selection Guidance
Feeder Type	Remote Control (constant speed)	Remote Control (constant speed)	Voltage Sensing	Voltage Sensing	Use RC feeders when welding procedures or codes specify wire feed speed and voltage.
Power Source Compatibility	CV Power Source (must	CV Power Source (must	DC1 CC/CV	DC1 CC/CV	VS feeders offer flexibility, as they work with
Physical Specifications	have 14-pin connection)	have 14-pin connection)			almost any welder².
Spool Size/Capacity	8 in/14 lb	8 in/14 lb or 12 in/45 lb	8 in/14 lb	8 in/14 lb or 12 in/45 lb	Use 12RC or 12VS for larger wire spools. Use
Weld Performance					8VS or 8RC when weight or size is a factor.
Duty Cycle	500 Amps at 100%	500 Amps at 100%	330 Amps at 60%	425 Amps at 60%	Use 12RC or 12VS to maximize deposition rates with larger wires.
Recommended Distance Between Feeder and Power Source	reen Feeder and cable length)		400+ ft (distance depends on the power source, weld cable size used,	400+ ft (distance depends on the power source, weld cable size used,	Use VS feeders when longer distances between the power source and feeder are required.
Simplicity & Control			and welding amperages)	and welding amperages)	
Number of Feeder Connections Back to Power Source	2 (weld cable, 24 VAC power/14-pin control cable)	2 (weld cable, 24 VAC power/ 14-pin control cable)	1 (weld cable)	1 (weld cable)	VS feeders have less cable to carry, damage or lose.
Remote Control Capabilities	Voltage Set at Feeder	Voltage Set at Feeder	Voltage or Current Set at Power Source	Voltage or Current Set at Power Source	RC feeders add convenience — no need to return to the power source to adjust voltage parameters.
Gas Purge, Wire Jog and Trigger Hold	- Gas Purge Standard - Wire Jog (inside case) - Trigger Hold Optional	- Gas Purge Standard - Wire Jog (inside case) - Trigger Hold Optional	- Gas Purge Standard - Wire Jog (front panel) - Trigger Hold Optional	All Standard (front panel)	VS and RC feeders have most often used controls conveniently located on front panel.

uitCase® 8RC and 12RC see Literature No. M/6.5

The SuitCase 8RC and 12RC offer remote voltage control, light weight and small size, with superior durability needed to stay in service and meet production schedules.



Models include Bernard® Q300 MIG gun with reversible dual size (.045 and 1/16 in) VK drive rolls! For more options, visit MillerWelds.com/equiptoweld (see pg 19).



*Other models available. A remote extension cord must be ordered separately.

The SuitCase 12RC door opens with feeder in upright position and has built-in slide rails.

Totally enclosed, impact-resistant, flameretardant case provides strength and durability, and protects components and welding wire from moisture, dust and other contaminants.

Ergonomically sound, lightweight, modular design is well balanced, and allows improved mobility and ease of carrying to remote welding sites and for serviceability.

Flexibility to run a variety of wires up to 5/64 in diameter.

Quick-change drive rolls are easy to change no tools required.

Drive roll accessibility makes it easy to install wire, adjust tension and change drive rolls.

Carrying handle folds up out of operators way, vet large enough for a gloved hand to carry.

Remote voltage control - standard for exceptional weld quality.

Gas solenoid valve—standard.

Industrial OV DC Use with CV, DC Power Sources.

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Suggested Power Sources

- CP-302 (pg 16)
- Deltaweld® 302 (pg 17)
- Invision® 352 MPa (pg 18)
- Invision® 456MP (pg 19)
- XMT® Series (except VS model) (pq 50/51)
- Trailblazer® (pg 64/65)

Suggested Guns

- Bernard® Q300 (GMAW)
- Bernard[®] Dura-Flux[™] (FCAW)
- Roughneck® (GMAW) (pg 92)
- Ironmate[™] (FCAW) (pg 92)

Most Popular Accessories

- Meter Kits (pg 91)
- Extension Cables (1 required) 25, 50, or 80 ft (7.6, 15, or 24.4 m) (pg 96)
- Shielding Gas Filter #195 189 Field
- Flowmeter Kit #300 343
- Volt/Current Sensor Kit #195 194 Field (For both modelsrequired for digital meter operation with power sources not having pins F and H in 14-pin receptacle.)

See your Miller distributor for other popular Miller options and accessories.

Model	Stock Number*	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
SuitCase 8RC	(#951 186) w/Bernard® Q300 Gun and Remote Voltage (#951 187) w/Bernard® Q300 Gun, Meters, Remote Voltage and Trigger Hold	24 VAC, 7 A, 50/60 Hz	500 A at 100% Duty Cycle	75 –700 IPM (1.9–17.8 m/min)	Solid Wire .023-5/64 in (0.6-2.0 mm) Flux Cored .030-5/64 in (0.8-2.0 mm)	8 in (203 mm), 14 lb (6.4 kg)	H: 14½ in (368 mm) W: 6½ in (165 mm) D: 155% in (397 mm)	22 lb (10 kg)
SuitCase 12RC	(#951 188) w/Bernard® Q300 Gun and Remote Voltage (#951 189) w/Bernard® Q300 Gun, Meters, Remote Voltage and Trigger Hold	24 VAC, 10 A, 50/60 Hz			Solid Wire .023-5/64 in (0.6-2.0 mm) Flux Cored .030-5/64 in (0.8-2.0 mm)	12 in (305 mm), 44 lb (20 kg)	H: 15½ in (394 mm) W: 9 in (229 mm) D: 21 in (533 mm)	25.5 lb (11.6 kg)



GET THE LATEST NEWS FROM MILLER!

Whether you weld for your Profession or are the Do-It-Yourself kind, we've got a market-specific PRO and DIY eNewsletter for you.

Delivered every six weeks, PRO and DIY feature topics selected for the professional or do-it-yourself welder.

Sign up for one or sign up for both and start receiving product updates, success stories, how-to and technical advice, project ideas and other welding information tailored to fit vour world.





Scan this tag to sign up for our email newsletter.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.

Sign up now at MillerWelds.com/newsletters





Spoolmate[™] 100 Series

Reliable and economical spool gun with excellent feeding to weld aluminum. For use with all Millermatic® 140 and 180 models, Millermatic® Passport® Plus, and Millermatic® 211 Auto-Set™ with MVP™



Light industrial spool gun rated at 135 amps at 30% duty cycle.

12 ft direct-connect cable with heavy-duty strain relief provides reach and accessibility to your work.

Dual V-knurled drive rolls with adjustable tension control for consistent feeding of different types

Clear spool canister protects the wire and allows you to easily see the spool.

Convenient carrying case holds gun and cable, extra contact tips, nozzle and wire (wire not included).

Light Industrial OCV DC

Use with CV, DC Power Sources

Process

• MIG (GMAW) with aluminum and other soft alloy wires

Suggested Power Sources

- Millermatic® 140 Auto-Set[™] (pg 8)
- Millermatic[®] 180 Auto-Set[™] (pg 8)
- Millermatic® Passport® Plus (pg 9)
- Millermatic® 211 Auto-Set™ with MVP[™] (pg 9)

Most Popular Accessories

• Retrofit Kit for Millermatic 140 and 180 models (prior to serial #LH210051N) #300 409

See your Miller distributor for other popular Miller options and accessories.

Stock Number	Welding Output Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Gun Weight
(#300 371)	135 A at 30% Duty Cycle	5-365 IPM (MM 140)	.030035 in (0.8 - 0.9 mm)	4 in (102 mm)	H: 11½ in (291 mm)	6 lb (2.7 kg) with cable assembly
		65-625 IPM (MM 180)	aluminum		W: 3 in (76 mm)	9 lb (4.1 kg) with case
		70-370 IPM (MM Passport Plus)	.023035 in (0.6-0.9 mm)		L: 13 in (330 mm)	
		65-625 IPM (MM 211)	steel and stainless steel			

Spoolmate[™] 200 Series see Literature No. M/1.47

Highly reliable and economical spool gun with excellent feeding to weld aluminum. Designed for home hobbyists and light fabricators. For use with Millermatic® 212 Auto-Set™ and Millermatic® 252.



Light industrial spool gun rated at 160 amps at 60% duty cycle. Ideal for welding with .023 - .035 in (0.6-0.9 mm) wires.

20 ft direct-connect cable with strain relief and sheath provides extended reach and accessibility to your work.

Wire feed speed adjustment is on the gun, not the machine — makes setup easy and saves time.

Easy access to drive assembly and drive rolls.

Two-stage trigger with built-in gas valve allowing preflow and postflow.

Toolless barrel removal for easy replacement of gun barrels. Three optional gun barrels!

Light Industrial

Use with CV, DC Power Sources

Process

• MIG (GMAW) with aluminum and other soft alloy wires

Suggested Power Sources

- Millermatic® 212 Auto-Set[™] (pg 10)
- Millermatic® 252 (pg 11)
- Millermatic® 251
- (discontinued product)
- Millermatic® 210/212 (discontinued product) with adapter cable #195 287

Most Popular Accessories

- 45-Degree Barrel #300 591
- 9-Inch Extension Barrel #300 592
- Heavy-Duty Barrel #300 593
- Spoolmatic Adaptor Cable #195 287 Allows connection to Millermatic 210 and 212 (non-Auto-Set). Wire feed speed controlled at the machine.

Stock Number	Welding Output Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Gun Weight with Cable Assembly
(#300 497)	160 A at 60% Duty Cycle	70-875 IPM	.030 – .035 (0.8 – 0.9 mm) aluminum .023 – .035 (0.6 – 0.9 mm) mild and stainless steel	4 in (102 mm)	H: 9 in (229 mm) W: 2½ in (64 mm) L: 14½ in (368 mm)	11 lb (5 kg)

Pistol Grip Guns See Literature No. M/1.73

Spoolmatic® spool guns and XR™ push-pull guns are the professional's choice for exceptional aluminum welding results in industrial or commercial applications.







Engineered for operator comfort, our well-balanced pistol grip guns give you portability and a 15 or 30 ft cable assembly to access those hard-to-reach welds.

Quick-change, single-turn contact tip provides excellent performance and ease of replacement.

Barrels are Roughneck® and Bernard® Centerfire™ compatible.

Easy access to drive assembly and removable head **tube** reduces service time by allowing a simple means of changing drive rolls and head tube or performing routine maintenance without disassembly of gun.

Improved, more robust drive housing machined from aluminum extrusion instead of a casting.

Wire feed speed adjustment on the gun handle and reversible drive rolls save time and money.

Spoolmatic Spool Gun Additional Features

Built-in gas valve eliminates the need to purge long gas lines.

Two-stage trigger includes gas preflow.

Spool canister rotates 180°.

XR Push-Pull Gun Additional Features

Both air- or water-cooled versions are available.

Trigger hold reduces fatigue by allowing operator to weld without holding trigger. (Feature only available when paired with XR[™]-Controls or XR-AlumaFeed[™].)

Replaceable feed cable liner reduces parts cost and service time by allowing a simple means of removing and replacing liner and not the complete feed cable.

Hook-Up Recommendations

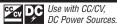
*Discontinued product.

Spoolmatic	CV Power Supply	Control/Module/Cable	
15A/30A Pistol Grip Guns	Millermatic® Vintage*, 250*, 250MP*	Need Module #043 084	
	Millermatic® DVI™*, DVI₂™*, 210*, 212*	Need Adapter Cable #195 287 (WFS controlled at machine)	
	Millermatic® 212 Auto-Set™, 250X*, 251*, 252, 300 w/meters*, 350*, 350P, Shopmate™ 300 DX	Direct Hook-Up	
	AlumaPower™ 350 MPa, CP Series, Deltaweld® Series, Dimension™ Series, Regency® 250*, Shopmaster™*, XMT® Series, Big Blue® 300 Pro, Big Blue® 350 PipePro®, Trailblazer® 275 DC, 302, 302 Air Pak™	Need WC-24 #137 549	
	Bobcat [™] Series, Miller Legend [®] 302*	Need WC-115A #137 546-01-1	
XR 15A/30A and	Millermatic 252, 350*, 350P	Direct Hook-Up	
15W/30W Pistol Grip Guns	AlumaPower™ 350 MPa, Deltaweld® Series, Dimension™ Series, Invision™ Series, XMT® Series (except VS model), Big Blue® 300 Pro, Big Blue® 350 PipePro®, Trailblazer® 275 DC, 302, 302 Air Pak™	XR-AlumaFeed™ (pg 13) or XR™-Controls (pg 29)	

*Drive rolls and drive roll kits must be ordered separately. A=Air-Cooled W=Water-Cooled

Gun Weight with Welding Maximum Spool Size Capacity Model Stock Number* **Output Rating** Wire Feed Speed Wire Diameter Capacity Dimensions Cable Assembly 70-875 IPM (1.8-22.2 m/min) H: 10¹/₄ in (260 mm) .030-1/16 in (0.8-1.6 mm) Spoolmatic 15A (#195 156) 15 ft (4.5 m) cable 200 A at 4 in (102 mm) 9 lb (4.1 kg) 100% Duty Cycle Wire speed dependent on aluminum wire and hard W: 2¹/₂ in (64 mm) Spoolmatic 30A (#130 831) 30 ft (9 m) cable 14 lb (6.4 kg) control box or Millermatic used. wire up to .045 in (1.1 mm) L: 151/8 in (384 mm) XR-A Pistol Gun (#198 127) 15 ft (4.6 m) cable Air: 200 A at 70-875 IPM (1.8-22.2 m/min) .030 - 1/16 in (0.8 - 1.6 mm) H: 73% in (187 mm) 13 lb (5.9 kg) 100% Duty Cycle W: 17/8 in (48 mm) Wire speed dependent on aluminum wire (#198 128) 30 ft (9 m) cable 21 lb (9.6 kg) control box or Millermatic used. L: 105% in (270 mm) XR-W Pistol Gun (#198 129) 15 ft (4.6 m) cable Water: 400 A at 14 lb (6.4 kg) 100% Duty Cycle 21.5 lb (9.7 kg) (#198 130) 30 ft (9 m) cable

Industrial O Spoolmatic 15A/30A Heavy Industrial XR-Pistol



Processes

- MIG (GMAW) with aluminum and other wires (XR guns require optional hardwire kits to run hard wire)
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested Power Sources

- For Spoolmatic Guns Only
- Millermatic[®] 212 Auto-Set[™] (pg 10)
- Shopmate[™] 300 DX (pg 49)
- Bobcat[™] (pg 60/62/63)

For Spoolmatic and XR Guns

- Millermatic® 252 (pg 11)
- Millermatic® 350P (pg 12)
- AlumaPower™ 350 MPa (pg 13)
- CP-302 (pg 16)
- Dimension[™] Series (pg 49)
- XMT® Series (except VS model) (pq 50/51)
- Dimension™ NT 450 (pg 53)
- Trailblazer® (pg 64/65)
- Big Blue 300 Pro (pg 67)
- Big Blue 350 PipePro® (pg 68)

Most Popular Accessories Weld Controls for Spoolmatic Guns Only

- WC-24 #137 549 (pg 96)
- WC-115A #137 546 (pg 96)
- WC-115A (with contactor) #137 546-01-1 (pg 96)
- WC-115 Contactor Kit #137 548 (pg 96)

Feeders for XR Guns Only

- XR-AlumaFeed™ (pg 13) or XR-Controls (pg 29) -Required with most power sources. See Hook-Up Recommendations chart at left.
- Hardwire Liner Kit #198 377









Gooseneck-Style Gun

XR-Aluma-Pro™ guns work in conjunction with XR™-Controls, XR-AlumaFeed™ or select Millermatic® machines to provide an outstanding solution for push-pull applications.



Accepts single-turn, quick-change FasTip™ and Bernard® Centerfire™ contact tips.

Replaceable feed cable, easy drive assembly access and removable head tube liner reduce service time.

Isolated, common, knurled drive rolls provide positive feeding performance.

Rotatable, self-seating head tube for various welding positions, reducing operator fatigue.

Hook-Up Recommendations

*Discontinued product.

XR-Aluma-Pro	CV Power Supply	Control/Module/Cable
Gooseneck- Style Gun	Millermatic 252, 350*, 350P	Direct Hook-Up
otyte dull	AlumaPower™ 350 MPa, Deltaweld® Series, Dimension™ Series, Invision™ Series, XMT® Series (except VS model), Bue® 300 Pro, Big Blue® 350 PipePro®, Trailblazer® 275 DC, 302, 302 Air Pak™	XR-AlumaFeed™ (pg 13) or XR™-Controls (see below)

A=Air-Cooled W=Water-Cooled

Heavy Industrial 🛑

Use with CC/CV, DC Power Sources

Processes

- MIG (GMAW) with aluminum wire (capable of other wires with optional hardwire kits)
- · Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested Power Sources

- Millermatic® 252 (pg 11)
- Millermatic® 350P (pg 12)
- AlumaPower[™] 350 MPa (pg 13)
- Deltaweld® Series (pg 17)
- Invision[™] 352 MPa (pg 18)
- Invision™ 456MP (pg 19)
- XMT® Series (except VS model) (pq 50/51)
- Trailblazer® (pg 64/65)

Most Popular Accessories

- XR-AlumaFeed[™] (pg 13) or XR[™]-Controls (see below) — Required with most power sources. See Hook-Up Recommendations chart at left.
- Hardwire Liner Kit #198 377

See your Miller distributor for other popular Miller options and accessories.

Gun Style	Stock Number	Weld Current Capacity	Wire Feed Speed	Wire Diameter Capacity	Dimensions	Gun Weight	Net Weight with Cable Assembly
XR-Aluma-Pro A Gun	(#300 000) 15 ft (4.6 m)	Air: 300 A at	70-900 IPM	.030-1/16 in	H: 5 in (127 mm)	2.5 lb	20 lb (9.1 kg)
	(#300 001) 25 ft (7.6 m)	100% Duty Cycle	(1.8-23 m/min)	(0.8–1.6 mm) aluminum wire	W: 2½ in (64 mm) L: 17 in (432 mm)	(1.1 kg)	27 lb (12.2 kg)
	(#300 264) 35 ft (10.6 m)		dependent on	Wire kit #230 708	L. 17 III (432 IIIIII)		33 lb (15 kg)
XR-Aluma-Pro W Gun	(#300 003) 15 ft (4.6 m)	Water: 400 A at		required to run		2.9 lb	22 lb (10 kg)
	(#300 004) 25 ft (7.6 m)	100% Duty Cycle	Millermatic used.	1/16 in (1.6 mm) wire.		(1.3 kg)	29 lb (13.2 kg)
	(#300 265) 35 ft (10.6 m)						35 lb (15.9 kg)

XR-S and XR-D Controls See Literature No. M/1.7

The updated XR-S and XR-D Controls offer unsurpassed performance and reliability for feeding aluminum and other difficult-to-feed wire types. The perfect choice for use with basic CV MIG power sources.



Models include both .035 and factory-installed 3/64 in drive rolls. Order 1/16 in control box drive rolls separately (#195 591).



Digital wire feed speed readout.

True torque feed motor push-pull design provides continuous push force to the wire while the gun motor controls the speed at the gun. The motors work together to provide accurate and positive wire feed speed without wire shaving or deformation.

Standard jog and purge as well as trigger hold for making long weldments without hand fatigue.

Adjustable wire run-in control allows are starting to be fine tuned, reducing wire stubbing or arc flaring which can result in a burnback to the contact tip.

XR-D Model Additional Features

Digital weld voltage readout.

Remote voltage control plus basic programmable weld sequencing for preflow, postflow, start, and crater provide higher quality welds.

Heavy Industrial



Use with CC/CV, DC Power Sources.

Processes

- . MIG (GMAW) with aluminum and other soft alloy wires
- · Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested Power Sources

- AlumaPower[™] 350 MPa (pg 13)
- Deltaweld® Series (pg 17)
- Invision™ 352 MPa (pg 18)
- Invision™ 456MP (pg 19)
- XMT[®] Series (except VS model) (pg 50/51)
- Trailblazer® (pg 64/65)

Suggested Guns

- XR[™]-Pistol (GMAW) (pg 28)
- XR-Aluma-Pro[™] (GMAW) (see above)

Most Popular Accessories

- Optima™ MIG Pulse Control #043 389 (pg 91)
- Extension Cables (pg 96)
- PSA-2 Control #141 604 (pg 96)
- Gas Flowmeter Kit #246 127

Stock Number	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
(#300 601) XR-S (#300 687) XR-D	24 VAC, 50/60 or 100 Hz	70-780 IPM (1.8-19.8 m/min)	.030 –1/16 in (0.8 – 1.6 mm) aluminum wire Wire kit #230 708 required to run 1/16 in (1.6 mm) wire.	12 in (305 mm)	H: 16 in (406 mm) W: 9 ¹ / ₄ in (235 mm) D: 21 ¹ / ₄ in (540 mm)	42.5 lb (19.2 kg)

22A and **24A**

Includes Bernard® 0300 See Literature No. M/11.0 Includes Bernard® 4300 15-ft MIG Welding Gun!

Simple to use, but built with the strength and flexibility to handle industrial manufacturing and fabricating, the 22A and 24A deliver proven reliability and economy.



Models include Bernard® Q300 MIG gun and .035/.045 drive rolls! For more options, visit MillerWelds.com/equiptoweld (see pg 19).



Both wire feeders are ideal for most high-duty-cycle **applications** requiring day-in/day-out trouble-free operation.

Trigger hold control for extended welds.

Two gear-driven drive rolls on 22A for smooth, positive wire feed. Four gear-driven drive rolls on 24A for larger wire sizes.

On-board burnback and motor ramp control for excellent starting and stopping performance.

Heavy-duty 16-gauge metal enclosure for extra durability. Remote voltage is standard on 24A.

Optional presettable voltage and wire feed speed on most power sources for 22A.

Industrial OV DC

Use with CV, DC Power Sources.

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Suggested Power Sources

- CP-302 (pg 16)
- Deltaweld® Series (pg 17)
- Invision[™] 352 MPa (pg 18)
- Shopmate[™] 300 DX (pg 49)
- XMT® Series (except VS) (pg 50/51)

Suggested Guns

- Bernard[®] and Tregaskiss[™]
- Roughneck® (pg 92)

Most Popular Accessories

- Digital Display #186 498
- Pre/Post Flow and Spot Control #186 496
- Voltage Control (22A) #194 211

See your Miller distributor for other popular Miller options and accessories.

Model/Stock Number		Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
22A (#951 190) (#951 191) w/Run-In Control	24A (#951 193) (#951 194) w/Digital Display	24 VAC, 7 A, 50/60 Hz	75-750 IPM (1.9-19 m/min)	22A .023-5/64 in (0.6-2.0 mm) 24A .023-3/32 in (0.6-2.4 mm)	60 lb (27 kg) coil with optional Wire Reel Assembly #108 008	H: 11 in (279 mm) W: 10 ³ / ₄ in (273 mm) D: 23 ¹ / ₂ in (597 mm)	22A 36 lb (15.4 kg)
(#951 192) w/Digital Display and Voltage Control	(#951 195) w/Digital Display and Pre/Post Flow					D. 2372 III (397 IIIIII)	24A 40 lb (18 kg)

70 SeriesSee Literature No. M/3.0 Includes Bernard® Q400 15-ft MIG Welding Gun!

Raising the bar for industrial-class wire feeders with all the traditional features, plus enhanced flexibility provided by features such as trigger hold, automatic run-in, and tool-less rotatable drive.



Models include Bernard® Q400 MIG gun (two with D-74 models), .035/.045 drive rolls and Centerfire™ contact tips! For more options, visit MillerWelds.com/equiptoweld (see pg 19).

MILITA

Models

74S

74D Digital Meters and Remote Voltage Control

74DX Deluxe—Digital Full Feature

*See page 31 for single- and dual-wire 74 MPa Plus feeders that operate synergicly with Invision 352 MPa power source.

Tool-less rotatable drive assembly allows operator to rotate the drive housing, allowing a straight path for wire flow.

Automatic run-in control significantly improves arc starts. Run-in can be independently set on the DX model.

Trigger hold allows the operator to make long welds without having to hold the trigger continuously. Reduces operator fatique.

Includes 10-ft 14-pin interconnecting cord.

DX Models Additional Features

Innud.

Dual schedule control allows the operator to switch between two welding parameters without readjusting the machine. saving time and enhancing quality.

Sequence control gives the operator complete control of the welding parameters: preflow, run-in, weld time, crater, burnback and postflow.

Welding process range control locks parameters at a set percentage of welding parameters to ensure welding procedures and quality standards are maintained.

Four weld programs allow the operators to store four independent welding parameters reducing weld setup time.

Wise Diameter

Heavy Industrial

Use with CV, DC Power Sources.

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Suggested Power Sources

- Deltaweld® Series (pg 17)
- Invision™ (pg 18/19)
- Dimension[™] Series (pg 49)
- XMT® Series (except VS model) (pg 50/51)
- Dimension[™] NT 450 (pg 53)

Suggested Guns

Bernard[®] and Tregaskiss[™]

Most Popular Accessories

- Feeder Cart #142 382 (pg 87)
- Aluminum Gun Kits for pushing aluminum wire (pg 92)
- Control Detachment Kits (pg 96)
- Extension Cables (pg 96)
- Spool Adapter #047 141 (pg 96)
- Turntable Assy #146 236 (pg 96)
- Wire Straightener (pg 96)
- Hanging Bail #058 435
- Wire Reel Assembly #108 008
- Conversion Kit For old power source to new 70 Series wire feeder #195 043
- .023-1/8 in drive rolls

. . . .

See your Miller distributor for other popular Miller options and accessories.

D: 35 in (889 mm)

	Input		wire Diameter	waximum Spooi		Net
Stock Number*	Power	Wire Feed Speed	Capacity	Size Capacity	Dimensions	Weight
Dual-Wire Models S-74S (#951 196) D-74S (#951 203) D-74D (#951 204) D-74D (#951 205) w/High-Speed Motor S-74DX (#951 201) w/High-Speed Motor S-74DX (#951 201) w/Low-Speed Motor S-74DX (#951 202) w/Low-Speed	24 VAC, 10 A, 50/60 Hz	50–780 IPM (1.3–19.8 m/min) Optional Low Speed: 20–400 IPM (0.5–10.2 m/min) Optional High Speed: 92–1435 IPM (2.3–36.6 m/min)	.023-1/8 in (0.6-3.2 mm) Low-speed motor option is recommended when using 1/8 in (3.2 mm) wire.	60 lb (27 kg) coil with optional Wire Reel Assembly #108 008	Single H: 14 in (356 mm) W: 12½ in (318 mm) D: 28 in (711 mm) Dual H: 14 in (356 mm) W: 21 in (533 mm) D: 35 in (889 mm)	Single 58 lb (26 kg) Dual 87 lb (39.5 kg)

WIRE FEEDERS



70 Series MPa Plus See Literature No. M/3.0

Includes Bernard® 0400 15-ft MIG Welding Gun!

The same great features and reliability of the traditional 70 Series with the added capability of push-pull aluminum, and more when optimized with the Invision MPa power source.



Models include Bernard® Q400 MIG gun (two with D-74 model), .035/.045 drive rolls and Centerfire™ contact tips! For more options, visit MillerWelds.com/equiptoweld (see pg 19).



Alumination™ technology gives you the ability to use the extended reach of a push-pull system for consistent, versatile and dependable aluminum wire feeding. Alumination gives you the versatility to handle whatever aluminum welding job you want to tackle.

Trigger schedule select allows the operator to select the alternative schedule by quickly tapping the gun trigger when not welding. When optimized with the Invision 352 MPa the operator can also switch from MIG to Pulsed MIG.

Accu-Mate[™] properly seats the power pin for best feeding performance and prevents Accu-Mate grooved MIG guns from sliding in the casting.



Optional XR-AlumaPro™ Plus push-pull gun for aluminum. Comes in 15-, 25- and 35-ft lengths for extended reach with trouble-free, reliable feeding. Gun is available in either air- or water-cooled versions.

Additional Features When Used With Invision 352 MPa and XMT 350 MPa Power Sources

Synergic Pulsed MIG operation when optimized with the Invision MPa power source. Provides communication between the power source, feeder and gun. As wire speed increases/decreases, the pulse parameters also increase/decrease to match the right amount of power needed.

Profile Pulse[™] provides TIG appearance with MIG simplicity and productivity.



Achieve "stacked dime" weld bead appearance without back-stepping. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

Heavy Industrial 🛑 CV DC

Use with CV, DC Power Sources

Processes

- MIG (GMAW) Flux Cored (FCAW)
- Pulsed MIG (GMAW-P) with optional MPa power source

Suggested Power Sources

- Deltaweld® Series (pg 17)
- Invision™ (pg 18/19)
- Dimension[™] Series (pg 49)
- XMT® Series (except VS model) (pg 50/51)
- Dimension™ NT 450 (pg 53)

Suggested Guns

- Bernard[®] and Tregaskiss[™]
- XR-AlumaPro[™] Plus (see below)

Most Popular Accessories

• XR-AlumaPro™ Plus push-pull guns for aluminum

15 ft air-cooled #300 000 001 25 ft air-cooled #300 001 001 35 ft air-cooled #300 264 001 15 ft water-cooled #300 003 001

25 ft water-cooled #300 004 001 35 ft water-cooled #300 265 001

Dedicated oun works with MPa Plus feeders using tachometer feedback to coordinate wire feed speed of the oun and the feeder.

- Feeder Cart #142 382 (pg 87)
- · Aluminum Gun Kits for pushing aluminum wire (pg 92) .035, 10 ft (3 m) #300 541 .047, 12 ft (3.7 m) #300 542 1/16, 12 ft (3.7 m) #300 543 Kits include .035, .047 or 1/16 in drive rolls and 10 or 12 ft Bernard® Q-Gun™
- Extension Cables (pg 96) 25 ft (7.6 m) #247 831 025 50 ft (15 m) #247 831 050 80 ft (24.4 m) #247 831 080
- Spool Adapter #047 141 (pg 96)
- Turntable Assembly #146 236 (pq 96)
- Wire Straightener (pg 96)
- Hanging Bail #058 435
- Wire Reel Assembly #108 008
- Spool Covers For S-74 and left side of D-74 models #057 607 For right side of



• .023-5/64 in drive rolls

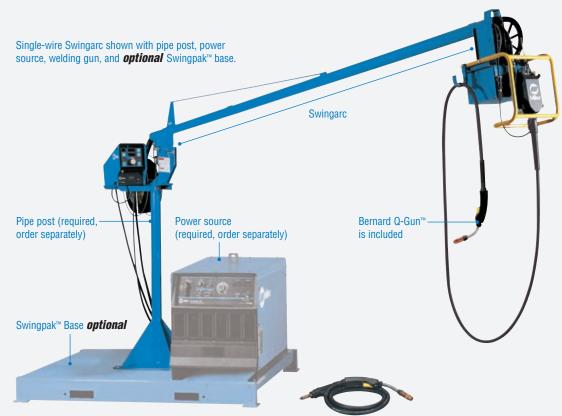
Model/Stock Number	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
Single-Wire Model S-74 MPa Plus (#951 291)	24 VAC, 10 A, 50/60 Hz	50-780 IPM (1.3-19.8 m/min)	Hard Wire .023–5/64 in (0.6–2.0 mm) Aluminum .035–1/16 in (0.9–1.6 mm) Wire kit #230 708 required to run	60 lb (27 kg) coil with optional Wire Reel Assembly #108 008	H: 14 in (356 mm) W:12½ in (318 mm) D: 28 in (711 mm)	58 lb (26 kg)
Dual-Wire Model D-74 MPa Plus (#951 292)			1/16 in (1.6 mm) aluminum wire.		H: 14 in (356 mm) W:21 in (533 mm) D: 35 in (889 mm)	87 lb (39.5 kg)

70 Series Swingarc™

Includes Bernard® Q400 15-ft MIG Welding Gun!

See Literature No. M/13.11

Swingarc boom-mounted wire feeders bring an extra dimension of flexibility and efficiency to weld stations dealing with large weldments, or wherever operator mobility is required.



Models in 8-, 12- or 16-ft lengths maximize output. The unique counterbalance design makes it easy and convenient to position the boom exactly where it is needed.

360-degree rotation and 60-degree lift angle maximizes work area (16-, 24- or 32-ft diameter work area).

Includes 10-ft 14-pin interconnecting cord.

In-boom cable routing organizes hoses and cables, protecting them from damage.

Quick-change drive rolls mean no tools are required by the operator to change drive rolls.

Models include Bernard® Q400 MIG gun (two with D-74 models), .035/.045 drive rolls and Centerfire" contact tips! For more options, visit MillerWelds.com/equiptoweld (see pg 19).



Heavy Industrial CV DC Use with CV, DC Power Sources.

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Suggested Power Sources

- Deltaweld® Series (pg 17)
- Invision™ (pg 18/19)
- Dimension[™] Series (pg 49)
- XMT® Series (except VS model) (pg 50/51)
- Dimension[™] NT 450 (pg 53)

Suggested Guns

Bernard[®] and Tregaskiss[™]

Most Popular Accessories

- Extension Cables (pg 96)
- Wire Reel Assembly #108 008
- Swingpak™ Base #183 997
- Pipe Post with 18 in Base 4 ft pipe #149 838 6 ft pipe #149 839
- Single/Dual Spool Carrier (Pipe Post not included) For use with 4 ft pipe #300 353 For use with 6 ft pipe #300 352

Model	Stock Number with Single-Wire Feeders	Stock Number with Dual-Wire Feeders	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Net Weight with Feeder
8 ft (2.4 m) Boom	\$\$-74\$8 (#951 208) w/\$-74\$ \$\$-74D8 (#951 211) w/\$-74D \$\$-74DX8 (#951 214) w/\$-74DX	DS-74S8 (#951 217) w/D-74S DS-74D8 (#951 220) w/D-74D DS-74DX8 (#951 223) w/D-74DX	24 VAC, 10 A, 50/60 Hz	50-780 IPM (1.3-19.8 m/min) Consult factory for	.023 – 5/64 in (0.6 – 2.0 mm)	60 lb (27 kg) coil with optional Wire Reel Assembly	Single-Wire Feeder 110 lb (50 kg) Dual-Wire Feeder 134 lb (61 kg)
12 ft (3.7 m) Boom	\$\$-74\$12 (#951 209) w/\$-74\$ \$\$-74D12 (#951 212) w/\$-74D \$\$-74DX12 (#951 215) w/\$-74DX	DS-74S12 (#951 218) w/D-74S DS-74D12 (#951 221) w/D-74D DS-74DX12 (#951 224) w/D-74DX		low- and high-speed motor options		#108 008	Single-Wire Feeder 160 lb (73 kg) Dual-Wire Feeder 207 lb (94 kg)
16 ft (4.9 m) Boom	\$\$-74\$16 (#951 210) w/\$-74\$ \$\$-74D16 (#951 213) w/\$-74D \$\$-74DX16 (#951 216) w/\$-74DX	DS-74S16 (#951 219) w/D-74S DS-74D16 (#951 222) w/D-74D DS-74DX16 (#951 225) w/D-74DX					Single-Wire Feeder 210 lb (95 kg) Dual-Wire Feeder 280 lb (127 kg)







SMAW





MillerWelds.com/Stick

Product Guide	Page	Class	Stick	DC TIG	DC TIG-P	Flux Cored*	CAC-A	Portability	Weldable Metals	Welding Amperage Range	Special Features	Typical Applications	
Thunderbolt® XL 225 AC	34	•						Optional running gear	Steel,	30-235 AC	Infinite control	Education, maintenance/repair, farm	
Thunderbolt® XL 225 AC/150 DC	34	•	•						stainless	30-235 AC 30-160 DC	Infinite control	Education, maintenance/repair, farm	=
Dialarc® 250 AC/DC	34	•	•	•			3/16"	Lift eye, optional running gear		35-300 AC 35-265 DC	One control knob with high/low range	Education, maintenance/repair, fabrication	-Phase
Maxstar® 150 S	35	•						Shoulder strap, optional case		20-150 DC	115−230 V Auto-Line™, MVP™ plugs	MRO, ship installation/repair, farm/ranch	
Maxstar® 200 STR	35	•	•	•				Shoulder strap, handle, optional cart	Most metals	1-200 DC	115 – 460 V Auto-Line™, Stick/TIG machine	Construction, fabrication, pipe, steel erection, shipbuilding	1 80
CST™ 280	36	•	•	•				Handle, optional cart		5-280 DC	High output, portable at 41 lb, also available in multi-unit rack	Construction, fabrication, pipe, steel erection, shipbuilding	3-Phase
XMT® Series	50	•	See	the	Multi	iproc	ess s	section on page 48.					8
SRH-444	34	•	•				5/16"	Lift eye, optional running gear	Most metals	30-280 DC 50-500 DC	Built-in Hot Start™	Steel erection, pipe, fab, shipbuilding, foundries	
Gold Star® 302	34	•	•	•			1/4-			15-395 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries	₩
Gold Star® 452	34	•		•			⁵ ⁄16°			20-590 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries	3-Phase
Gold Star® 652	34	•					3/8"			50-850 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries	•
Dimension™ Series	49		See	the	Mult	iproc	ess s	section on page 48.					

CLASS: Light Industrial Industrial Heavy Industrial CAPABILITY: Designed for this process Capable of this process

*Constant-current (Stick) machines can utilize voltage-sensing wire feeders for some Flux Cored applications.

For more detailed information, see individual specification sheets.

PRODUCT KEY



Thunderbolt XL 225 AC and 225 AC/150 DC See Literature No. AC/2.0 for AC model and AD/8.0 for AC/DC model



Thunderbolt XL 225 AC shown.

- · Unit allows higher duty cycle when amperage decreases.
- · Infinite current control.
- Output selector switch on AC/DC units.
- Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Light Industrial

225 AC model

Process • Stick (SMAW)

Comes Complete With

- 15 ft (4.5 m) No. 4 electrode cable with heavy-duty electrode holder
- 10 ft (3 m) work cable with clamp
- · Power cord with plug

See distributor for Miller accessories.

		Welding	Rated Output at 20% Duty Cycle,	Rated Output at	Amps Input	at Rated Output	Max. Open-		Net
Model	Stock Number	Amperage Ranges	60 Hz (15% Duty Cycle, 50 Hz)	100% Duty Cycle	220 V	230 V	Circuit Voltage	Dimensions	Weight
Thunderbolt XL 225 AC (CSA)	(#903 641) 230 V, 50/60 Hz	AC 30-235	AC 225 A at 25 VAC	AC 100 A	_	47.5	80	H: 18¾ in (476 mm) W: 12¾ in (323 mm)	85 lb (39 kg)
Thunderbolt XL 225 AC/150 DC (CSA)	(#903 642) 230 V, 50/60 Hz	AC 30-235 DC 30-160	AC 225 A at 25 V DC 150 A at 25 V	AC 100 A DC 65 A	_	47.5	80	D: 17½ in (445 mm)	104 lb (47 kg)

Dialarc® 250 AC/DC see Literature No. AD/2.1

Superb performance and versatility in a flexible Stick machine.

- Single-dial infinite current control.
- · High and low ranges.
- · Forced-draft cooling fan.
- Superior 6010 and 7018 Stick welding.
- High output and duty cycle.
- · Optional remote weld output control.

Light Industrial
Industrial CC AC 1

Processes

- Stick (SMAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (3/16 in carbons)

See distributor for Miller accessories.

	Welding Amperage Ranges	Rated Output		Input at 208 V			60 Hz 575 V	KVA	KW	Max. Open- Circuit Voltage	Dimensions	Net Weight
AC	35-300	225 A at 29 VAC, 30% Duty Cycle	84	_	73	36	29	16.8	9.8	70	H: 24 ¹ / ₄ in (616 mm) W: 19 in (483 mm)	360 lb (163 kg)
DC	35-265	225 A at 29 VAC, 30% Duty Cycle	92	_	80	40	32	18.6	11.8	79	D: 28 in (711 mm)	(103 kg)
AC	35-300	225 A at 29 VAC, 30% Duty Cycle	_	60	55	27	22	12.5	9.9	70		365 lb
DC	35-265	225 A at 29 VAC, 30% Duty Cycle	_	66	60	30	24	13.7	10.8	79		(166 kg)

(#907 017) 200(208)/230/460 V (**#907 016**) 230/460/575 V With Power Factor Correction (#907 015) 208/230/460/575 V

Without Power Factor Correction

Stock Number

Stock Number

See Literature No. DC/7.0

Proven durability and the ability to handle a wide range of applications.

- Electrical amperage control. · Remote control capability.
- High and low output studs.
- · Control circuit overload protection.

Heavy Industrial	•	CC I	Phase

Processes

- Stick (SMAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (5/16 in carbons)

See distributor for Miller accessories.

Welding Amperage Ranges	Rated Output at 60% Duty Cycle	Amps 208	Input at 230 V	Rated (460 V	Output, 6 575 V	O Hz KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
30-280 50-500	400 A at 36 V	89	80	40	32	31.9	19.6	75	H: 30 ¹ / ₄ in (768 mm) W: 22 ¹ / ₂ in (572 mm) D: 35 ³ / ₄ in (908 mm)	784 lb (356 kg)

Gold Star® Series See Literature No. DC/8.1

WIRFLESS COMPATIBLE

Gold Star 452 shown.

(#900 751) 208/230/460 V (#**900 753**) 230/460/575 V

See pages 46 and 47 for wireless

remote controls.

 Hot Start™ and built-in arc control. Enclosed circuit board.

- Thermal overload protection with light.
- Fan-On-Demand™.
- 15 A, 115 VAC duplex receptacle.
- Power efficient.
- Remote control capability.
- · Optional digital volt and amp meters.

CC DC Heavy Industrial

Processes

- Stick (SMAW) TIG (GTAW)
- · Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons - 302: 1/4 in, 452: 5/16 in, 652: 3/8 in)
- Flux Cored (FCAW)
- MIG Spray Transfer (GMAW) with voltage-sensing feeder

See distributor for Miller accessories.

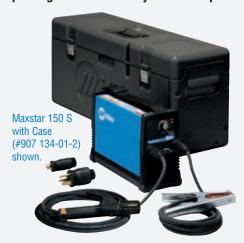
Model	Stock Number	Amperage Range in CC Mode	Rated Output	Amps II 200 V	nput at Ra 230 V	nted Outpu 460 V	ıt, 60 Hz 575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions (Includes lift eye and strain relief.)	Net Weight
Gold Star 302	(#903 373) 200(208)/230/460 V (#903 398) 230/460/575 V	15-395	300 A at 32 VDC, 60% Duty Cycle	70	61	31	25	24.5	13.8	72 VDC	H: 30 in (762 mm) W: 23 in (585 mm)	352 lb (160 kg)
Gold Star 452	(#903 374) 200(208)/230/460 V (#903 400) 230/460/575 V	20-590	450 A at 38 VDC, 60% Duty Cycle	102	89	45	36	35.5	23.3	72 VDC	302 D: 30½ in (775 mm) 450 D: 38 in (966 mm) 675 D: 38 in (966 mm)	404 lb (183 kg)
Gold Star 652	(#903 402) 230/460/575 V	50-850	650 A at 44 VDC, 60% Duty Cycle	_	124	62	50	49.4	36	72 VDC	ט פיזט (שניווון) אוו פיזט פיזט פיזט פיזט פיזט פיזט פיזט פיזט	505 lb (229 kg)

Rugged, reliable performance and superior arc characteristics.

Maxstar® 150 S

See Literature No. DC/27.0

Best in class—provides maximum portability and performance in the most compact Stick package in the industry. Packs dependability and performance all in one machine.



*See page 39 in the TIG section for Maxstar 150 STL and STH. **Sense voltage for Stick and Lift-Arc™ TIG.

Multi-voltage plug (MVP™) allows connection to 115 or 230 V receptacles without tools — choose the plug that fits the receptacle and connect it to the power cord.

Portable in the shop or at the job site (13.2 lb). The shoulder strap allows the operator to easily move from location to location.

Auto-Line[™] circuitry automatically connects to 115–230 VAC. single-phase power without removing the covers to relink the power source.

Low OCV Stick™ reduces open-circuit voltage to 12-16 VDC when power source is not in use.

Adaptive Hot Start™ for Stick arc starts prevents electrode from sticking.

Single amperage range allows operator to accurately set amperage on both 115 or 230 V primary power.

Light Industrial

Process • Stick (SMAW)

#907 134 Comes Complete With

- Power source
- Primary cord and MVP[™] plugs
- 13 ft (4 m) lead with electrode holder and 25 mm Dinse connector
- 10 ft (3 m) work lead with clamp and 25 mm Dinse connector
- Shoulder strap

#907 134-01-2 Includes Above Plus

Protective X-CASE^T

Most Popular Accessories

- MVP[™] Plugs (pg 93)
- Protective X-CASE[™] #300 184 (pg 93)

See your Miller distributor for other popular Miller options and accessories.

Stock Number*
(#907 134)
115-230 VAC, 50/60 Hz
(#907 134-01-2)
115-230 VAC, 50/60 Hz w/Case

Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open- Circuit Voltage	Dimensions	Net Weight
115 VAC	20-100	70 A at 22.8 VDC, 100% Duty Cycle	17.4	2.0	1.9	90	H: 9 in (229 mm)	13.2 lb
		100 A at 24 VDC, 35% Duty Cycle	26.4	3.0	3.0	(12-16 VDC**)	W: 5½ in (140 mm) D: 13¼ in (337 mm)	(6.0 kg)
230 VAC	20-150	100 A at 24 VDC, 100% Duty Cycle	13.1	3.0	2.8	90	D. 1374 III (337 IIIIII)	
		150 A at 26 VDC, 30% Duty Cycle	21.6	4.9	4.7	(12-16 VDC**)		

Maxstar® 200 STR See Literature No. DC/29.5

Unit provides maximum flexibility by automatically connecting to any input power while maintaining the best DC Stick/TIG welding performance in its product class.



*See page 40 in the TIG section for Maxstar 200 Series.

**Sense voltage for Stick and Lift-Arc™ TIG.

input voltage hook-up (115-460 V, single- or threephase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Allows for any

Low OCV Stick™ model reduces opencircuit voltage to 9-14 VDC when power source is not in use. This built-in circuit design eliminates the need for add-on voltage reducers. See chart below for Low OCV model stock number.

Excellent for thin and medium wall pipe welding.

Lift-Arc™ start for TIG arc starts without the use of high frequency.

Remote amperage control provided through 14-pin receptacle on front of the machine.

Adaptive Hot Start™ for Stick arc starts automatically increases output amperage at start of weld should the start require it. Prevents electrode from sticking and creating an inclusion.

location to location.

Industrial •

Processes

• Stick (SMAW) • TIG (GTAW)

Comes Complete With

- Power source
- 8 ft (2.4 m) primary cord
- (2) 50 mm Dinse connectors
- · Adjustable shoulder strap

Most Popular Accessories

- Air-Cooled TIG Torch Adapter #195 378 (pg 87)
- Protective Cover #195 321 (pg 95)
- RCCS-14 Remote Fingertip Control #043 688 (pg 95)
- RFCS-14 HD Remote Foot Control #194 744 (pg 95)
- Weldcraft® WP17V12RM TIG Torch See your Miller distributor for other popular Miller options and accessories.

Dimensions

H: 131/2 in

W: 71/2 in

D: 17½ in (445 mm)

(343 mm)

(191 mm)

Portable at 32 lb — easily moved from

Stock Number*	
("007.000)	
(#907 036)	
Low OCV	

(#907 036-00-1) Normal OCV

Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps I	nput at I 230 V	Max. Open- Circuit Voltage					
Stick	Three-Phase	1-200	150 A at 26 V, 60% Duty Cycle	_	13.1	7.4	6.4	5.2	5.0	70 VDC	
	Single-Phase	1-200 (1-90 on 115 VAC)	150 A at 26 V, 60% Duty Cycle	_	21.7	_	_	5.0	5.0	(9-14 VDC**)	
			125 A at 25 V, 50% Duty Cycle	34.1	_	_	_	4.0	3.8		
			90 A at 24 V, 100% Duty Cycle	25.0	_	_	_	4.0	3.8		
TIG	Three-Phase	1-200	175 A at 17 V, 60% Duty Cycle	_	10.5	6.0	5.2	4.2	4.0	70 VDC	
	Single-Phase	1-200 (1-150 on 115 VAC)	175 A at 17 V, 60% Duty Cycle	_	17.4	_	_	4.0	4.0	(9–14 VDC**)	
			150 A at 16 V, 70% Duty Cycle	29.7	14.1	_	_	3.4	3.4		
			110 A at 15 V, 100% Duty Cycle	20.0	_	_	_	2.0	2.0		

Net

Weight

(14.5 kg)

32 lb



CST[™] 280

See Literature No. DC/29.55

Durable Stick/TIG welding power source in a lightweight (41 lb) package designed for the construction industry. 280 amps of output is ideal for Stick electrodes up to 3/16 in and TIG welding of pipe and plate.



Easy voltage changeover between voltage ranges through a two-position manual switch. Conveniently located on the rear panel, it simplifies voltage change in racks.

Simple-to-operate process selector knob automatically sets proper dig setting on E6010 and E7018 electrodes providing superior Stick performance.

Lift-Arc[™] start for TIG arc starts without the use of high frequency.

Fan-On-Demand™ cooling system operates only when needed providing power efficiency and noise reduction.

Stand-alone or rack-mounted. Optional 4-pack or 8-pack rack often used in construction/shipyards is available for multioperator applications. All controls including the power switch are located on front of machine for easy access. See page 56.

Remote amperage control provided through 14-pin receptacle on front of the machine. This permits use of standard amperage control devices.

Tweco®- or Dinse-style connectors available. The Dinse-style includes one set of male connectors; the Tweco-style does not.

CC DC 3 1 Industrial

Processes

• Stick (SMAW) • TIG (GTAW)

Most Popular Accessories

- CST 280 Rack (pg 56)
- RCC-14 Remote Fingertip Control #151 086 (pg 95)
- RCCS-14 Remote Fingertip Control #043 688 (pg 95)
- RFCS-14 Remote Foot Control #043 554 (pg 95)
- RFCS-14 HD Remote Foot Control #194 744 (pg 95)
- RHC-14 Remote Hand Cntrl (pg 95) 20 ft (6 m) #242 211 020 100 ft (30.5 m) #242 211 100
- RPBS-14 Remote Push Button Control #300 666 (pg 95)
- For TIG torches see Lit. Index No. DC/29.55

See your Miller distributor for other popular Miller options and accessories.

Note: Primary input current draw is limited to 50 A.

Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output					Output 440 V			KVA KW	Max. Open- Circuit Voltage	Dimensions	Net Weight
(# 907 244) Dinse-style	Stick/TIG	Three- Phase	5-280	280 A at 31.2 V, 35% Duty Cycle	_	35.0	34.2	_	_	17.8	14.7	14.6 10.2	- W	H: 13½ in (343 mm) W: 7½ in (191 mm)	41 lb (18.6 kg)
220-230/460-575 V				200 A at 28 V, 100% Duty Cycle	_	23.3	22.5	_	_	11.7	9.7	9.6 6.4			
(#907 244-01-1) Tweco®-style 220-230/460-575 V		Single- Phase	5-200	200 A at 28 V, 50% Duty Cycle	_	43.9	43.0	_	_	_	_	10.1 6.6			
220 200, 100 010 1				150 A at 26 V, 100% Duty Cycle	_	32.7	32.0	_	_	_	_	7.3 4.6		D: 18 in	
(#907 251) Dinse-style	Stick/TIG	Three- Phase	5-280	280 A at 31.2 V, 35% Duty Cycle	36.0	33.0	28.8	19.8	18.0	17.5	_	14.0 10.2		(457 mm)	
208-230/400-460 V				200 A at 28 V, 100% Duty Cycle	23.5	23.0	22.8	13.5	12.0	12.7	_	10.2 6.9			
(#907 251-01-1) Tweco®-style 208-230/400-460 V		Single- Phase	5-200	200 A at 28 V, 50% Duty Cycle	43.9	43.3	43.0	_	_	_	_	9.9 6.5			
200 200, 100 400 V				150 A at 26 V, 100% Duty Cycle	35.0	33.9	32.9	_	_	_	_	7.6 4.8			







Scan this tag to find ways to connect with us.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.

CONNECT WITH MILLER IN MORE PLACES

Join the thousands of people that have already connected with us on Facebook, Twitter and YouTube.

Our **YouTube** channel has a variety of videos ranging from product set-up to welding demonstrations.

Become a Fan of our Miller page on Facebook and hear the news first! Get updates from us right to your Facebook account.

If you are looking for quick updates from Miller, follow us on Twitter to see what's new.













GTAW





MillerWelds.com/TIG

Power	Source		D	C		AC/DC										
Weldin Perfor		Maxstar® 150 (Pg 39)	Maxstar® 200 (Pg 40)	Maxstar® 350 (Pg 41)	Maxstar® 700 (Pg 41)	Dynasty® 200 (Pg 42)	Dynasty® 350 (Pg 43)	Dynasty® 700 (Pg 43)	Syncrowave® 200 (Pg 44)	Syncrowave® 250 DX (Pg 44)	Syncrowave® 350 LX (Pg 44)	Diversion™ 165 and 180 (Pg 45)				
0	Min. – Max. (Amps)	5-150 A	1-200 A	3-350 A	5-700 A	5-200 A (AC) 1-200 A (DC)	3-350 A	5-700 A	5-200 A	3-310 A	3-400 A	10-180 A (Up to 165 A w/165 model)				
Material	Min. – Max. (Aluminum and Magnesium)	-	-	_	-	.020-1/4"	.015-5/8"	.020-1"	.020-1/4"	.015-3/8"	.015-1/2"	.030 – 3/16"				
Material Thickness	Min. – Max. (Mild Steel, Stainless Steel, and Exotic Metals)	.020-3/16"	.004-1/4"	.012-5/8"	.020-1"	.004-1/4"	.012-5/8"	.020-1"	.020-1/4"	.012-1/2"	.012-5/8"	.025 – 3/16"				
Stick	E6010-6011	1/8"	3/16"	5/16"	5/16"	3/16"	5/16"	5/16"	3/16"	1/4"	5/16"	_				
	E6013	1/8"	3/16"	5/16"	5/16"	3/16"	5/16"	5/16"	3/16"	1/4"	5/16"	_				
	E7018	1/8"	5/32"	1/4"	5/16"	5/32"	1/4"	5/16"	5/32"	7/32"	1/4"	_				
Diameter	E7024	3/32"	1/8"	1/4"	5/16"	1/8"	1/4"	5/16"	1/8"	3/16"	1/4"	_				
Ottob	E6010-6011	★ 6011*	***	***	***	***	***	***	*	**	**	_				
Stick Process	E6013	***	***	***	***	***	***	***	**	**	**	_				
Quality	E7018	**	***	***	***	***	***	***	**	**	**	_				
	E7024	**	***	***	***	***	***	***	*	**	**	_				
	Max. Electrode Diameter	-	5/32"	1/4"	3/8"	5/32"	1/4"	3/8"	5/32"	3/16"	1/4"	_				
	Balance Control					•	•	•	•	•	•					
Contunes	AC Frequency					•	•	•								
Features	Pulse Capability	0.5, 1, 2.5, 60 PPS (STH Model)	0.1-500 PPS (DX Model)	0.1-5000 PPS	0.1-5000 PPS	0.1-500 PPS (DX Model)	0.1-500 PPS (AC) 0.1-5000 PPS (DC)	0.1-500 PPS (AC) 0.1-5000 PPS (DC)	0.1-15 PPS	0.25-10 PPS (Optional)	0.25-10 PPS	_				
	Generator Power Requirement	5 kW	5.5 kW	12 kW	32 kW	8.5 kW	13 kW	35 kW	12.5 kW	22 kW	30 kW	5.5 kW				

ICON KEY

PROCESS QUALITY: ★Good ★★ Better ★★★ Best

*For best results choose 6011.



TIG Technology Innovations Improve Performance

Miller set the standard for TIG technology more than 35 years ago with the introduction of the Syncrowave® Series with squarewave technology.

Today, Maxstar® and Dynasty® welders continue that tradition of innovation, featuring advanced TIG technology. They set new standards for productivity and weld quality improvements while lowering the cost of product installation and operation.

Compared to conventional technology, Maxstar and Dynasty welders give you more tools for your specific application. Payback often occurs in 18 months or less. Here's how:



Maxstar

Advanced DC TIG Technology for Carbon, Stainless and Other Alloys

- Superior arc control
 - Focused arc cone results in faster travel speeds with advanced pulse
 - · Reduced heat input for less warping, better part fit-up
 - Better arc control, optimizes weld bead profile to reduce post-weld grinding
- Blue Lightning™ arc starter
 - · Precise arc starting, improves weld quality and consistency
 - More arc starts before re-sharpening the tungsten

Dynasty

Same as the Maxstar, Plus Advanced AC TIG Technology for Aluminum

- Faster travel speeds
- Increased penetration on thicker sections
- Better arc and puddle control
- · Improve weld quality
- · Optimize bead profile
- · Easier to train new operators to weld

Maxstar and Dynasty

Less to Install and Operate

- Lower amperage draw than conventional welding power sources
 - · Smaller wiring and circuit breakers required
 - Add capacity with existing available power
 - · Eliminate costly changes to primary power
 - Potential utility rebates; check with your local power company for details

Unmatched primary power flexibility

- · Operates on single- or three-phase power
- Plug into virtually any voltage
- Extremely tolerant of voltage fluctuations to maintain weld quality and reduce rework

Better for Mobile Welding

- Compact designs allow for easy transportation
 - Take your welding machine to where you need to weld
 - No need for long lead extensions
 - Eliminate cable clutter and increase weld performance
 - · Adjust settings quickly where you are welding

Amazing power per pound performance

- · Superior TIG/Stick start and weld puddle control
- . The ability to run any electrode

Maxstar® 150 STL — DC Stick/TIG Lift-Arc See Literature No. DC/27.1 STH — DC Stick/TIG HF Start See Literature No. DC/27.2

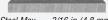


Maxstar 150 STH TIG/Stick Package with Remote and Case (#907 136-01-7) shown.

Welding **Capability** Not to scale.







Two models available —

STL: DC TIG/Stick with Lift-Arc™ starting without the use of high frequency.

STH: DC TIG/Stick with HF and Lift-Arc[™] starting, plus built-in pulsing with a selection of four fixed-pulse frequencies.

Auto-Line™ circuitry automatically connects to 115-230 V. single-phase power without removing the covers to relink the power source.

Multi-voltage plug (MVP™) allows connection to 115 or 230 V receptacles without tools—choose the plug that fits the receptacle and connect it to the power cord.

Portable in the shop or at the job site (13.7 lb).

Low OCV Stick™ reduces open-circuit voltage to 12-16 VDC when power source is not in use.

Single amperage range allows operator to accurately set amperage on both 115 or 230 V primary power.

Built-in gas solenoid eliminates the need for bulky torch with a gas valve.

Light Industrial • CC DC

Processes

- TIG (GTAW) Stick (SMAW)
- Pulsed TIG (GTAW-P) w/STH model

Standard Pkg Comes With

- Power source
- Primary cord and MVP[™] plugs
- 13 ft (4 m) lead with electrode holder and 25 mm Dinse connector
- 10 ft (3 m) work lead with clamp and 25 mm Dinse connector
- Shoulder strap

TIG/Stick Pkg Includes Above Plus

- Weldcraft® WP1712RDI25 TIG torch with adapter
- · Protective carrying case
- Smith® flow gauge regulator with hose

Most Popular Accessories

- MVP[™] Plugs (pg 93)
- Protective X-CASE™ #300 184 (pg 93)
- RCCS-6M Remote Fingertip Control (pg 95) #195 184
- RFCS-6M Remote Foot Control (pg 95) #195 183
- Remote Controls (pg 95)

See your Miller distributor for other popular Miller options and accessories.

*See page 35 in the Stick section for Maxstar 150 S. **Sense voltage for Stick and Lift-Arc™ TIG.

Model/Stock Number*
Maxstar 150 STL
(#907 135) Standard Package
(#907 135-01-6) TIG/Stick Package
(#907 135-01-7) TIG/Stick Package with
Remote Fingertip Control (#195 184)

Maxstar 150 STH (#907 136) Standard Package (#907 136-01-7) TIG/Stick Package with Remote Fingertip Control (#195 184)

Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open- Circuit Voltage	Dimensions	Net Weight
TIG	115 VAC	5-150	100 A at 14 VDC, 100% Duty Cycle	18.4	2.1	2.1	90 VDC	H: 9 in	13.7 lb
			150 A at 16 VDC, 30% Duty Cycle	28.0	3.4	3.1	(12-16 VDC**)	(229 mm) W: 5½ in	(6.2 kg)
	230 VAC	5-150	100 A at 14 VDC, 100% Duty Cycle	8.3	2.0	1.9		(140 mm)	
			150 A at 16 VDC, 30% Duty Cycle	14.2	3.2	3.1		D: 13 ¹ / ₄ in	
Stick	115 VAC	20-100	70 A at 22.8 VDC, 100% Duty Cycle	17.4	2.0	1.9	90 VDC	(337 mm)	
			100 A at 24 VDC, 35% Duty Cycle	26.4	3.0	3.0	(12-16 VDC**)		
	230 VAC	20-150	100 A at 24 VDC, 100% Duty Cycle	13.1	3.0	2.8			
			150 A at 26 VDC, 30% Duty Cycle	21.6	4.9	4.7			

Do-It-Yourself

EXPLORE YOUR PASSION, **BUILD YOUR BUSINESS**

Need advice for improving your manufacturing, fabrication or construction operations? Have a passion for motorsports? Or are you simply looking for project inspiration? Explore the Industries & Interest sections on MillerWelds.com and you'll find technical articles, case studies, products, news and online resources geared specifically for you. Let us help you get the job done!

Stay connected at MillerWelds.com/interests



Maxstar® 200 Series DC TIG and Stick See Literature No. DC/32.0



NEW! Water-Cooled Complete Package with Wireless

Foot Control. Improve productivity, maneuverability and reduce potential trip hazard with the wireless foot control. The wireless control operates the welding machine output up to 90 ft away without a cord. The package components have been selected to provide the optimum performance for TIG welding. See at right for package content.



Allows for any input voltage hook-up (115 – 460 V, single-

or three-phase) with no manual linking, providing convenience in any job setting.

*See page 35 in the Stick section for Maxstar 200 STR.

Note: Coolmate 1 must be plugged into a 115 V source (wall).

**Sense voltage for Stick and Lift-Arc™ TIG.

DC TIG Features

- . Blue Lightning™ high frequency arc starter for non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional HF arc starters. Easy to set and increases productivity.
- Lift-Arc[™] start provides DC arc starting without the use of high frequency.
- Exceptionally smooth and precise arc for welding exotic materials.

DC Stick Features

- Tailored arc control (DIG) allows the arc characteristic to be changed for specific applications and electrodes. Smooth running for 7018 or stiffer, more penetrating
- Hot Start[™] adaptive control provides positive arc starts without sticking.

Industrial 🔵 Heavy Industrial 🌖

Processes

- TIG (GTAW) Stick (SMAW)
- Pulsed TIG (GTAW-P) with DX and LX models
- Air Carbon Arc (CAC-A)

Three Models Available: SD, DX, LX

Feature	SD	DX	LX
Digital Meters	•	•	•
HF	•	•	•
Lift-Arc™	•	•	•
Trigger Options			•
Pulser		•	•
Sequencer			•
Pre/Postflow	•	•	•
DIG	•	•	•
Automation Connection			•

Comes With

- Power source
- 8 ft (2.4 m) primary cord
- (2) 50 mm Dinse connectors
- · Air-cooled TIG torch adapter #195 378
- · Adjustable shoulder strap

Water-Cooled Complete Package **Includes Above Plus**

- 2-Wheel Trolley Cart
- Coolmate[™] 1 cooler (115 V)
- Coolant (1 gallon)
- · Wireless Foot Control or RFCS-14 HD remote foot control or RCCS-14 fingertip control
- 25 ft (7.6 m) Weldcraft® WP20 water-cooled torch
- 15 ft (4.6 m) work lead with clamp
- Gas hose
- Regulator/flowmeter
- Torch accessory kit with tungsten
- · Cable cover

Note: Stick electrode holder not included, must be ordered separately. Air-cooled TIG torch adapter not included.

Air-Cooled Package Comes With

- Power source
- · Protective carrying case containing the following:
- RFCS-14 HD remote foot control or RCCS-14 fingertip control
- 25 ft (7.6 m) Weldcraft® WP17 air-cooled torch
- 15 ft (4.6 m) lead w/electrode holder
- 15 ft (4.6 m) work lead with clamp
- Gas hose
- · Flow gauge regulator
- Torch accessory kit with tungsten

Model/Stock Number* Machine Only	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps I	nput at I 230 V	Rated Lo 400 V	ad Outpi 460 V	ut, 50/6 KVA	60 Hz KW	Max. Circu Volta
(#903 701) SD	TIG	Three-Phase	1-200	175 A at 17 V, 60% Duty Cycle	_	10.5	6.0	5.2	4.2	4.0	70 VE
(#903 701-01-1) DX (#903 701-01-2) LX		Single-Phase	1-200	175 A at 17 V, 60% Duty Cycle	_	17.4	_	_	4.0	4.0	(9-1
Water-Cooled Complete Packages			1-150 (115 V)	150 A at 16 V, 70% Duty Cycle	29.7	14.1	_	_	3.4	3.4	
(#951 396) DX w/Wireless Foot Control				125 A at 15 V, 100% Duty Cycle	23.0	_	_	_	2.6	2.6	
(#951 137) DX w/Foot Control	Stick	Three-Phase	1-200	150 A at 26 V, 60% Duty Cycle	_	13.1	7.4	6.4	5.2	5.0	
(#951 138) DX w/Fingertip Control		Single-Phase	1-200	150 A at 26 V, 60% Duty Cycle	_	21.7	_	_	5.0	5.0	
Air-Cooled Packages (#951 172) DX w/Foot Control			1-90	125 A at 25 V, 50% Duty Cycle	34.1	_	_	_	4.0	3.8	
(#951 173) DX w/Fingertip Control			(115 V)	90 A at 24 V, 100% Duty Cycle	25.0	_	_	_	4.0	3.8	

Nax. Open- ircuit oltage	Dimensions	Net Weight
0 VDC 9-14 VDC**)	Machine H: 13½ in (343 mm) W: 7½ in (191 mm) D: 17½ in (445 mm)	Machine 37 lb (16.8 kg)
	Complete H: 46 ¹ / ₄ in (1175 mm) W: 23 ¹ / ₂ in (597 mm) D: 22 ¹ / ₄ in (565 mm)	Complete 129 lb (59 kg)









Maxstar® 350 and 700 DC TIG and Stick See Literature No. DC/24.0



NEW! Complete Package with Wireless Foot Control.

Improve productivity, maneuverability and reduce potential trip hazard with the wireless foot control. The wireless control operates the welding machine output up to 90 ft away without a cord. The package components have been selected to provide the optimum performance for TIG welding. See at right for package content.



pulled through the machine.

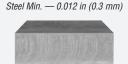
Allows for any input voltage hook-up (208 – 575 V) with no manual linking, providing convenience in any job setting.

Wind Tunnel Technology™ protects internal electrical components from airborne contaminants, extending

product life. Fan-On-Demand™ cooling system only operates when needed to reduce noise, energy use and contaminants

120 V auxiliary power receptacle for cooling system or small tools.

Maxstar 350 Welding Capability Not to scale.



Steel Max. — 5/8 in (15.9 mm)

Maxstar 700 Welding Capability

Not to scale.

Steel Min. — 0.020 in (0.5 mm)



Steel Max. — 1 in (25.4 mm)

Auto-postflow calculates the length of postflow time based on the amperage setting. Eliminates need to independently set postflow time for different amperages. preserves tungsten and prevents porosity.

Program memory features 9 independent program memories that maintain/save your parameters.

Meter calibration for certification purposes.

Optional Automation Interface Kit (#195 516) includes automation PC board, 28-pin socket receptacle with harness, and 28-pin plug connector. Provides required and advanced automation controls.

NC TIG Features

- Blue Lightning[™] high frequency arc starter for non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional HF arc starters. Easy to set and increases productivity.
- Lift-Arc[™] start provides DC arc starting without the use of high frequency.
- Exceptionally smooth and precise arc for welding exotic materials.
- High-speed DC TIG pulse controls capable of 5000 pulses per second.

DC Stick Features

*More packages are available — see our Web site or Literature No. DC/24.0. **Sense voltage for Low OCV Stick and Lift-Arc™ TIG.

- Tailored arc control (DIG) allows arc characteristics to be changed for specific application and electrode. Smooth running for 7018 or stiffer, more penetrating
- Hot Start[™] adaptive control provides positive arc starts without electrode sticking.

Heavy Industrial CC DC 3

Processes

- TIG (GTAW)
- Pulsed TIG (GTAW-P)
- Stick (SMAW)
- Air Carbon Arc (CAC-A)

Maxstar 350 Comes With

- Power source
- 8 ft (2.4 m) primary cord
- (2) Dinse 50 mm connectors
- (1) Set-up and operation CD

Maxstar 700 Comes With

- Power source (primary cord not included)
- (1) thread lock torch adapter
- (2) thread lock weld cable connectors
- (1) Set-up and operation CD

Maxstar 350 Complete Package **Includes Above Plus**

- Runner[™] cart
- . Coolmate™ 3.5 cooler
- · Coolant (4 gallons)
- · Wireless Foot Control or RFCS-14 HD remote foot control
- 25 ft (7.6 m) Weldcraft® CS310 water-cooled torch
- 15 ft (4.6 m) work lead with clamp
- · Gas hose
- · Regulator/flowmeter
- Torch accessory kit with tungsten
- · Cable cover

Note: Stick electrode holder not included, must be ordered separately.

Weldcraft® Water-Cooled Torch Kits

- 250 A Torch Kit #300 185 (pg 95) • 300 A Torch Kit #300 183 (pg 95)
- 400 A Torch Kit #300 186 (pg 95)
- **Most Popular Accessories**

• Wireless Remote Foot Control

- #300 429 (pg 47)
- · Wireless Remote Hand Control #300 430 (pg 47)
- Runner™ Cart #300 244 (pg 87)
- Coolmate[™] 3.5 Cooler #300 245 (pg 89)
- · Low-Conductivity Coolant
- #043 810 (pg 89)
- Remote Controls (pg 95)

Model	Stock Number*	Input Power	Welding Amperage Range	Rated Output					utput, 5 575 V			Max. Open- Circuit Voltage	Dimension	ns	Net Weight
Maxstar	Maxstar (#907 334) Machine only 350 Complete Packages (#951 400) w/Wireless Foot Control (#951 399) w/Foot Control	Three- Phase Single- Phase	3-350	250 A at 30 V, 100% Duty Cycle	27	24	14	12	9	9.7	9.3	75 VDC		H: 24¾ in (629 mm)	Machine
350				300 A at 32 V, 60% Duty Cycle	33	30	17	15	12	12	11.5	(10-15 VDC**)		D: 22 in (559 mm)	135 lb (61 kg)
				180 A at 27.2 V, 100% Duty Cycle	32	29	_	14	11	6.4	6	_		H: 45½ in (1146 mm)	Complete
				225 A at 29 V, 60% Duty Cycle	41	37	-	19	15	8.6	8.2			(/	308 lb (140 kg)
Maxstar	(#907 103) Machine only	Three-	5-700	500 A at 40 V, 100% Duty Cycle	67	60	35	30	24	24	23	75 VDC	Machine	H: 34½ in (876 mm)	Machine
700		Phase		600 A at 44 V, 60% Duty Cycle	89	80	46	40	32	32	31	(10-15 VDC**)		W: 13¾ in (349 mm) D: 22 in (559 mm)	198 lb (90 kg)
		Single- Phase		360 A at 34 V, 100% Duty Cycle	77	70	_	35	28	16	15			D. 22 III (359 IIIIII)	(90 kg)
				450 A at 38 V, 60% Duty Cycle	106	96	_	48	38	22	21				



Dynasty® 200 Series AC/DC TIG and Stick See Literature No. AD/4.8



NEW! Water-Cooled Complete Package with Wireless Foot Control. Improve productivity, maneuverability and reduce potential trip hazard with the wireless foot control. The wireless control operates the welding machine output up to 90 ft away without a cord. The package components have been selected to provide the optimum performance for TIG welding. See at right for package content.



Allows for any input voltage hook-up (115 – 460 V, single-

or three-phase) with no manual linking, providing convenience in any job setting.

Blue Lightning™ high frequency arc starter for TIG non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional HF arc starters. Easy to set and increases productivity.

Lift-Arc™ start provides AC and DC TIG arc starting without the use of high frequency.

Portable in the shop or at the job site, the two-wheel cart makes it easy to maneuver the entire package to the work area. For more portability, detach the 45 lb welder and take it anywhere.

Welding Capability

Not to scale.

Aluminum Min. — 0.020 in (0.5 mm) Steel Min. — 0.004 in (0.1 mm)



Aluminum Max. — 1/4 in (6.4 mm) Steel Max. — 1/4 in (6.4 mm)

AC TIG Features

- Extended AC balance (30-99%) controls amount of oxide cleaning (amperage time in EN) which is essential for high quality welds on aluminum.
- AC frequency (20-250 hz) controls the width of the arc cone and the force of the arc.

AC Waveforms



Advanced squarewave, fast freezing puddle, deep penetration and fast travel speeds. **Soft squarewave** for a soft buttery arc with maximum puddle control and good wetting action.



Sine wave for customers that like a traditional arc. Quiet with good wetting. **Triangular wave** reduces the heat input and is good on thin aluminum. Fast travel speeds.

DC TIG Features

• Exceptionally smooth and precise arc for welding exotic materials.

AC/DC Stick Features

- Tailored arc control (DIG) allows the arc characteristic to be changed for specific applications and electrodes. Smooth running for 7018 or stiffer, more penetrating for 6010.
- Hot Start™ adaptive control provides positive arc starts without sticking.
- AC frequency control adds additional stability when Stick welding in AC for smoother welds.

Industrial 🔵 Heavy Industrial 🌖

Processes

- TIG (GTAW) Stick (SMAW)
- Pulsed TIG (GTAW-P) w/DX model
- Air Carbon Arc (CAC-A)

Two Models Available: SD and DX

Feature	SD	DX
Digital Meters	•	•
HF	•	•
Lift-Arc™	•	•
Trigger Options	•	•
Pulser		•
Sequencer		•
Pre/Postflow	•	•
DIG	•	•
Wave Forms	•	•

Comes With

- Power source
- 8 ft (2.4 m) primary cord
- (2) 50 mm Dinse connectors
- Air-cooled TIG torch adapter #195 378
- · Adjustable shoulder strap

Water-Cooled Complete Package **Includes Above Plus**

- 2-Wheel Trolley Cart
- Coolmate[™] 1 cooler (115 V)
- · Coolant (1 gallon)
- Wireless Foot Control or RFCS-14 HD remote foot control or RCCS-14 fingertip control
- 25 ft (7.6 m) Weldcraft[®] WP20 water-cooled torch
- 15 ft (4.6 m) work lead with clamp
- Gas hose
- Regulator/flowmeter
- Torch accessory kit with tungsten
- · Cable cover

Note: Stick electrode holder not included, must be ordered separately. Air-cooled TIG torch adapter not included.

Air-Cooled Package Comes With

- Power source
- Protective carrying case containing the following:
- RFCS-14 HD remote foot control or RCCS-14 fingertip control
- 25 ft (7.6 m) Weldcraft[®] WP17 air-cooled torch • 15 ft (4.6 m) lead w/electrode holder
- 15 ft (4.6 m) work lead with clamp
- Gas hose
- · Flow gauge regulator
- Torch accessory kit with tungsten

See your Miller distributor for popular Miller options and accessories.

*Sense voltage for Stick and Lift-Arc™ TIG.	
Note: Duty cycle is limited on 115 V power.	Coolmate 1 must be plugged into a 115 V source

Model/Stock Number Machine Only (#907 099) SD (#907 099-01-1) DX Water-Cooled Complete Packages

(#951 397) DX w/Wireless Foot Control (#951 139) DX w/Foot Control (#951 140) DX w/Fingertip Control

Air-Cooled Packages (#951 174) DX w/Foot Control (#951 175) DX w/Fingertip Control

Welding Process	,	Welding Amperage Range	Rated Output	Amps I	Input at I	Rated Lo 400 V	ad Outpo	ut, 50/6 KVA	60 Hz KW	1
TIG	Three-Phase	1-200	200 A at 18 V, 20% Duty Cycle	_	13.7	8.7	6.9	5.5	5.2	1
			150 A at 16 V, 60% Duty Cycle	_	9.4	6.0	4.7	3.8	3.6	1
	Single-Phase	1-200	150 A at 16 V, 60% Duty Cycle	_	15.8	_	7.9	3.6	3.6	
		1-150	140 A at 15.6 V, 40% Duty Cycle	31.0	_	_	_	3.6	3.5	
		(115 VAC)	100 A at 14 V, 100% Duty Cycle	20.7	_	_	_	2.3	2.3	
Stick	Three-Phase	1-200	200 A at 28 V, 20% Duty Cycle	_	20.8	13.0	10.2	8.1	7.8	1
			130 A at 25.2 V, 60% Duty Cycle	_	12.3	7.6	6.0	4.8	4.6	
	Single-Phase	1-200	130 A at 25.2 V, 60% Duty Cycle	_	20.0	_	10.0	4.7	4.7	
		1-105	100 A at 24 V, 60% Duty Cycle	31.3	_	_	_	3.6	3.6	1
		(115 VAC)	90 A at 23.6 V, 100% Duty Cycle	27.6	_	_	_	3.2	3.2	

(wall).

Max. Open- Circuit Voltage	Dimensions	Net Weight
80 VDC (5-10 VDC*)	Machine H: 13½ in (343 mm) W: 7½ in (191 mm) D: 21½ in (546 mm)	Machine 45 lb (20.5 kg)
	Complete H: 46¼ in (1175 mm) W: 23½ in (597 mm) D: 221¼ in (565 mm)	Complete 137 lb (62 kg)

Dynasty® 350 and 700 AC/DC TIG and Stick See Literature No. AD/5.0



NEW! Complete Package with Wireless Foot Control.

potential trip hazard with the wireless foot control. The

wireless control operates the welding machine output up

to 90 ft away without a cord. The package components

have been selected to provide the optimum performance

manual linking, providing convenience in any job setting.

TIG non-contact arc initiation. Provides more consistent

arc starts and greater reliability compared to traditional

HF arc starters. Easy to set and increases productivity.

Lift-Arc™ start provides AC and DC TIG arc starting

Wind Tunnel Technology™ protects internal electrical

components from airborne contaminants, extending

Auto-postflow calculates the length of postflow time

amperages, preserves tungsten and prevents porosity.

based on the amperage setting. Eliminates need to

independently set postflow time for different

120 V auxiliary power receptacle for cooling system or

without the use of high frequency.

product life.

small tools.

Allows for any input voltage

hook-up (208 - 575 V) with no

Improve productivity, maneuverability and reduce

for TIG welding. See at right for package content.

Blue Lightning™ high frequency arc starter for

Dynasty 350

machine only

Dynasty 350 Welding Capability

Not to scale.

Aluminum Min. — 0.015 in (0.38 mm) Steel Min. — 0.012 in (0.3 mm)



Aluminum Max. — 5/8 in (15.9 mm) Steel Max. — 5/8 in (15.9 mm)

Dynasty 350 Complete Package

Dynasty 700 Welding Capability

Not to scale.

Aluminum Min. — 0.020 in (0.5 mm) Steel Min. — 0.020 in (0.5 mm)



Aluminum Max. — 1 in (25.4 mm) Steel Max. — 1 in (25.4 mm)

with Wireless Foot Control

Program memory features 9 independent program memories that maintain/save your parameters.

Meter calibration for certification purposes.

AC TIG Features

- Independent amplitude/amperage control allows the EP and EN amperages to be set independently to precisely control heat input to the work and electrode.
- Extended balance (30 99%) controls the amount of oxide cleaning (amperage time in EN) which is essential for high quality welds on aluminum.
- AC frequency (20 400 Hz) controls the width of the arc cone and the force of the arc (directional control).
- AC waveforms include advanced squarewave, soft squarewave, sine wave and triangular wave for the ultimate in control.

DC TIG Features

- Exceptionally smooth and precise arc for welding exotic materials.
- High-speed DC TIG pulse controls capable of 5000 pulses per second.

AC/DC Stick Features

- Tailored arc control (DIG) allows arc characteristics to be changed for specific application and electrode. Smooth running for 7018 or stiffer, more penetrating
- Hot Start[™] adaptive control provides positive arc starts without electrode sticking.
- AC frequency control adds additional stability when Stick welding in AC for smoother welds.

*More packages are available — see our Web site or Literature No. AD/5.0. **Sense voltage for Low OCV Stick and Lift-Arc™ TIG.

Heavv Industrial

Processes

- TIG (GTAW) Stick (SMAW)
- Pulsed TIG (GTAW-P)
- Air Carbon Arc (CAC-A)

Dynasty 350 Comes With

- Power source
- 8 ft (2.4 m) primary cord
- (2) Dinse 50 mm connectors
- (1) Set-up and operation CD

Dynasty 700 Comes With

- Power source (primary cord not included)
- (1) thread lock torch adapter
- (2) thread lock weld cable connectors
- (1) Set-up and operation CD

Complete Package Includes Above Plus

- Runner[™] cart
- Coolmate™ 3.5 cooler
- Coolant (4 gallons)
- · Wireless Foot Control or RFCS-14 HD remote foot control
- 25 ft (7.6 m) water-cooled torch (350: Weldcraft® CS310) (700: Weldcraft® WP18SC)
- 15 ft (4.6 m) work lead with clamp
- · Gas hose
- · Regulator/flowmeter
- Torch accessory kit with tungsten
- · Cable cover

Note: Stick electrode holder not included, must be ordered separately.

Weldcraft® Water-Cooled Torch Kits

- 250 A Torch Kit #300 185 (pg 95) • 300 A Torch Kit #300 183 (pg 95)
- 400 A Torch Kit #300 186 (pg 95)

Most Popular Accessories

- Wireless Remote Foot Control #300 429 (pg 47)
- · Wireless Remote Hand Control #300 430 (pg 47)
- Runner™ Cart #300 244 (pg 87)
- Coolmate[™] 3.5 Cooler #300 245 (pg 89)
- · Low-Conductivity Coolant

#043 810 (pg 89)

Remote Controls (pg 95)

Model	Stock Number*	Input Power	Welding Amperage Range	Rated Output					utput, 50 575 V			Max. Open- Circuit Voltage	Dimension	18	Net Weight
Dynasty	(#907 204) Machine only	Three-	3-350	250 A at 30 V, 100% Duty Cycle	29	26	15	13	10	10.3	9.9	75 VDC	Machine	H: 24 ³ / ₄ in (629 mm)	Machine
350	(#951 402) w/Wireless Foot Control	Phase	-	300 A at 32 V, 60% Duty Cycle	35	32	16	16	13	12.7	12.1	(10-15 VDC**)		W: 13 ³ / ₄ in (349 mm) D: 22 in (559 mm)	135 lb (61 kg)
		Single- Phase		180 A at 27.2 V, 100% Duty Cycle	35	32	-	15	12	7.4	6.8	_	Complete	H: 45½ in (1146 mm) W: 23½ in (587 mm)	Complete 308 lb
	w/Foot Control			225 A at 29 V, 60% Duty Cycle	47	43	-	21	17	9.8	9.1			D: 43 ³ / ₄ in (1111 mm)	(140 kg)
Dynasty	(#907 101) Machine only	Three-	5-700	500 A at 40 V, 100% Duty Cycle	75	68	39	34	27	27	26	75 VDC	Machine	H: 34½ in (876 mm)	Machine
700	Complete Packages (#951 404)	Phase		600 A at 44 V, 60% Duty Cycle	97	88	51	44	35	35	34	(10-15 VDC**)		W: 13¾ in (349 mm) D: 22 in (559 mm)	198 lb (90 kg)
	w/Wireless Foot Control (#951 403)	Single-		360 A at 34 V, 100% Duty Cycle	82	74	_	37	30	17	16		Complete	H: 55½ in (1400 mm) W: 23½ in (587 mm)	Complete 370 lb
	w/Foot Control	Phase		450 A at 38 V, 60% Duty Cycle	115	104	-	52	42	24	22			D: 43¾ in (1111 mm)	(168 kg)



Syncrowave® eries

The world's first and most reliable conventional squarewave TIG power source.

Processes

- TIG (GTAW)
- Stick (SMAW)
- Pulsed TIG (GTAW-P) (optional on 250 DX)
- Air Carbon Arc (CAC-A)

Squarewave output with AC balance control features adjustable penetration and cleaning action while increasing arc stability on various aluminum alloys, and helps eliminate tungsten spitting and arc rectification.

120 V auxiliary power receptacle for cooling system or small tools.

Syncro Start™ technology for customized arc starts, allows for more precise arc starts and fine-tuning based on tungsten diameter and material thickness.

HF arc starting provides non-contact arc starting that eliminates tungsten or material contamination.

Dual digital meters allow for guick and easy viewing of actual and preset values of amperage and voltage.

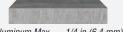
Syncrowave 200 AC/DC TIG and Stick See Literature No. AD/4.4



Welding Capability

Not to scale.

Aluminum Min. — 0.020 in (0.5 mm) Steel Min. — 0.020 in (0.5 mm)



Aluminum Max. — 1/4 in (6.4 mm) Steel Max. — 1/4 in (6.4 mm)

Cable management system uses dual cable hangers and foot control storage conveniently attached to the power source side panels.

Auto-postflow protects the weld end zone and electrode by optimizing postflow time based on welding amperage.

Light Industrial •

Runner Model Comes With

- Power source
- 6 ft (1.8 m) primary cord
- . No. 39 Running Gear
- RFCS-14 remote foot control
- 12-1/2 ft (3.8 m) Weldcraft® WP17 TIG torch
- 15 ft (4.6 m) lead w/electrode holder
- 15 ft (4.6 m) work lead with clamp
- · Flow gauge regulator with hose
- · Cable and remote foot pedal holders
- See distributor for Miller accessories.

Stock Number (#907 308-00-1) 208-230 V Runner

welding Amperage Range	40% Duty Cycle	208-230 V	KVA	KW	Circuit Voltage	Dimensions	Net Weight
5 – 200	150 A at 26 V	54	12.5	6.0	80	H: 301/6 in (765 mm) W: 211/6 in (537 mm) D: 211/2 in (546 mm)	238 lb (108 kg)

Syncrowave 250 and 350 AC/DC TIG and Stick See Literature No. AD/4.2



Welding Capability

Not to scale

Aluminum Min. — 0.015 in (0.4 mm) Steel Min. — 0.012 in (0.3 mm)



250 DX Model

Aluminum Max. — 3/8 in (9.5 mm) Steel Max. — 1/2 in (12.7 mm)

350 LX Model

Aluminum Max. — 1/2 in (12.7 mm) Steel Max. — 5/8 in (15.9 mm)

Coolmate™ 3X cooler (shown in Complete Package). 3-gallon cooling system features a flow indicator to visually indicate system is working and an external filter to stop objects from entering the water-cooled torch cable.

Last procedure recall automatically recalls the last procedure set-up when switching polarity.

Line voltage compensation keeps power source constant regardless of fluctuations in input power ($\pm 10\%$).

Lift-Arc[™] start provides DC arc starting without the use of high frequency.

Built-in consumable storage drawer located on front panel for easy access.

Heavy Industrial

Syncrowave 250 DX and 350 LX **Come With**

 Power source (primary cord not included)

• (2) Dinse 50 mm connectors

Complete Package Includes Ahnve Plus

- . No. 37 Running Gear
- Coolmate[™] 3X cooler
- · Coolant (4 gallons)
- RFCS-14 remote foot control
- 25 ft (7.6 m) water-cooled torch (Syncro 250: Weldcraft® WP20) (Syncro 350: Weldcraft® CS310)
- 15 ft (4.6 m) work lead with clamp
- · Regulator/flowmeter with hose
- Torch accessory kit with tungsten
- Cable cover

Note: Stick electrode holder not included, must be ordered separately.

See distributor for Miller accessories.

*More packages are available — see our Web site or Literature No. AD/4.2.

Complete Package

Add 12¾ inches to height with Complete Package. *Add 139 pounds with Complete Package.

Model	Stock Number*	Welding Amp Range	Rated Output		put at AC B 250 DX, 60 460 V				Max. Open- Circuit Voltage	Dimensions**	Net Weight***
Syncrowave 250 DX	(#907 195) 230/460/575 V, 50/60 Hz, Machine only (#951 118) 230/460/575 V, 50/60 Hz, Complete	3-310	200 A at 28 VAC, 60% Duty Cycle 250 A at 30 VAC, 40% Duty Cycle	77 96	38 48	31 38	17.6 21.98	8.6 11.76	80	H: 36½ in (921 mm) W: 22½ in	378 lb (172 kg)
Syncrowave 350 LX	(#907 199) 230/460/575 V, 50/60 Hz, Machine only (#951 120) 230/460/575 V, 50/60 Hz, Complete	3-400	300 A at 32 VAC, 60% Duty Cycle 350 A at 34 VAC, 40% Duty Cycle	110 128	55 65	42 50	25 29.5	10.6		(572 mm) D: 25 in (635 mm)	496 lb (225 kg)











Diversion • 'IG Welders





Scan this tag to see video on the Diversion advantage.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.

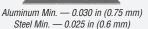
Personal Appeal. Professional Grade.

Leave it to Miller to take a professional-grade arc and put it in a package designed specifically for personal users. Diversion AC/DC TIG welders contain all of the features you need and nothing more. Just simplicity combined with superior performance and honest value.

The Diversion series of TIG welders: Making welding easy, fun and affordable — with a TIG arc quality that's undeniably Miller.

Diversion™ 165 and 180 AC/DC TIG See Literature No. AD/1.5







Aluminum Max. — 3/16 in (4.8 mm) Steel Max. — 3/16 in (4.8 mm)





TIG Welding for Dummies book, set-up and operation DVD, Smith Argon regulator/flow gauge with hose, and welding project blueprint (not shown) included with each Diversion model.

Easy-to-understand operator interface. Power up, select material type, set material thickness range and start welding!

Inverter-based, AC/DC power source provides a more consistent welding arc while using less power.

HF start for non-contact arc starting that eliminates tungsten and material contamination.

Fan-On-Demand™ cooling system only operates when needed to reduce noise and maintenance.

Portable. At 50 lb they can be taken anywhere.

Auto-postflow protects the weld end zone and electrode by optimizing postflow time based on welding amperage.

Advanced squarewave AC provides a fast freezing weld puddle and deeper penetration.

The Diversion 180 model includes an RFCS-RJ45 remote foot control and a multi-voltage plug (MVP™). Plug allows connection to 115 or 230 V receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

Light Industrial

Process • TIG (GTAW)

Comes With

- · Power source with primary cord (50 A, 230 V plug on 165 model) or (MVP[™] plugs on 180 model)
- RFCS-RJ45 remote foot control (180 model only)
- 12-1/2 ft (3.8 m) Weldcraft® LS17 TIG torch with backcap, ceramic gas cup, 3/32 in (2.4 mm) collet and collet body, and 2% ceriated tungsten
- 12 ft (3.7 m) work lead with clamp
- Smith® Argon regulator/flow gauge with hose
- TIG Welding for Dummies book with content written by Miller
- Set-up and operation DVD
- · Welding project blueprint for a machine cart/cylinder rack

Most Popular Accessories

- Premium Running Gear/ Cylinder Rack #770 187 (pg 88)
- Protective Cover #300 579 (pg 95)
- Adapter Cord for RJ45 to 14-Pin #300 688 (pg 95)
- RFCS-RJ45 Remote Foot Control #300 432 (pg 95)
- 125 A. Air-Cooled Standard Torch Body #9LGC
- 125 A, Air-Cooled Pencil Torch Body #9PLGC
- 125 A, Air-Cooled Flex Torch Body #9FXLGC
- 150 A. Air-Cooled Flex Torch Body #17FXLGC

vviine iuniig.									
Model/Stock Number	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output	KVA	KW	Max. Open- Circuit Voltage	Dimensions	Net Weight
Diversion 165	230 VAC	10-165	60 A at 12.4 V, 100% Duty Cycle	8 (.20)*	1.8 (.04)*	1.2 (.02)*	80	H: 17 in (433 mm)	50 lb
(#907 005)			150 A at 16 V, 20% Duty Cycle	23 (.20)*	5.3 (.04)*	3.7 (.02)*		W: 9% in (251 mm) D: 23% in (608 mm)	(23 kg)
			165 A at 16.6 V, 15% Duty Cycle	25.5 (.20)*	5.9 (.04)*	4.2 (.02)*			
Diversion 180	115 VAC	10-125	60 A at 12.4 V, 100% Duty Cycle	11.3 (.88)*	1.3 (.1)*	1.2 (.03)*			
(#907 460)			125 A at 15 V, 35% Duty Cycle	26.5 (.88)*	3.1 (.1)*	3.0 (.03)*			
	230 VAC	10-180	60 A at 12.4 V, 100% Duty Cycle	5.6 (.44)*	1.3 (.1)*	1.2 (.03)*			
			150 A at 16 V, 20% Duty Cycle	16 (.44)*	3.7 (.1)*	3.6 (.03)*			
			180 A at 17.2 V, 10% Duty Cycle	20.5 (.44)*	4.7 (.1)*	4.6 (.03)*			



WIRELESS

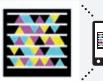
REMOTES (FOOT & HAND CONTROLS)

llerWelds.com/Wireless





Complete Control with No Cords Attached





Scan this tag to see wireless remote videos.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.

Increases Productivity • Saves Money • Improves Safety • Easy to Use

Experience Freedom and Control

- Repositioning the remote quickly and easily around the weld without having to untangle cords improves productivity. No need for trips back to the power source to change parameters.
- Going wireless eliminates standard remote control cords that are a regular point of wear, failures and the associated downtime.
- Safety is improved by reducing clutter and potential tripping hazards.
- Wireless provides the same performance, responsiveness and effectiveness as the corded remote models.
- Improves weld quality with precise operator control.
- Standard AA batteries have a long battery life and allow for quick and easy replacement.
- Hand Control belt clip keeps the remote secure and accessible.

Check out MillerWelds.com/wireless for videos, articles, and an ROI calculator tool!

Suggested Power Sources



Wireless Remotes are recommended for use with the following power sources.

Wireless Remote Foot Control

Maxstar® 150 STL and STH* (pg 39)
Maxstar® 200 SD, DX and LX (pg 40)
Maxstar® 350 and 700 (pg 41)
Dynasty® 200 SD and DX (pg 42)
Dynasty® 350 and 700 (pg 43)
Syncrowave® 250 DX and 350 LX (pg 44)

PipeWorx™ Welding System** (pg 54)
*Requires Adapter Cord #300 507.

**Requires PipeWorx Wireless Remote Control Kit #300 859 for PipeWorx Systems purchased before March 2011.

Wireless Remote Hand Control

Gold Star® Series (pg 34)
CST™ 280 (pg 36)
Maxstar® 200*, 350 and 700 (pg 40 and 41)
Dynasty® 200, 350 and 700 (pg 42 and 43)
Dimension™ Series (pg 49)
XMT® Series ** (pg 50 and 51)
CST™ 280 Rack (pg 56)
XMT® 304 and 350 Racks** (pg 57)
Trailblazer® Series (pg 64 and 65)
Big Blue® 300 Pro (pg 67)
Big Blue® 350 PipePro® (pg 68)
Big Blue® 400 Eco Pro (pg 69)
Miller Du-Op® (pg 69)

*Excludes Maxstar 200 STR. **Excludes XMT 350 VS.





Wellight Wireless Remote Foot Control

See Literature No. AY/6.5

The Wireless Remote Foot Control, designed specifically for TIG welding in manufacturing, fabrication and plant applications, allows the operator to adjust amperage at the point of use without being limited to the range of the remote cord.



*Some applications are not suitable for wireless communication. Keep in mind that the rated range is subjective, and depends on factors such as obstructions, frequency interference, transmission technology, and weather. The figures listed assume ideal conditions are present.

Improves productivity and maneuverability by eliminating cord tangles. Reduces clean up time and work area cord clutter.

Improves safety by eliminating control cord and reducing potential trip hazard.

Improves reliability by eliminating control cord failure.

Multiple frequency sharing allows up to 20 systems to operate in a 90-ft (27.4 m) radius with accuracy and precision — and without delay, system interference, or crosstalk.

Auto On feature extends the battery life up to 250 hours of welding without turning the pedal on and off.

Easy-to-install receiver plugs directly into the 14-pin receptacle of Miller machines.

Easily programmable. Control can be quickly and easily paired with any other Miller 14-pin wireless receiver. (Control is preprogrammed when purchased with the receiver.)

Easy-Glide Wear Pads™ glide across concrete, making it easy to reposition the pedal for comfort and speed.

Industrial (

Processes

• TIG (GTAW) • Pulsed TIG (GTAW-P)

Comes Complete With

- · Wireless foot control transmitter
- · Wireless 14-pin receiver
- · Battery box with 3 AA batteries
- 4 Easy-Glide Wear Pads™

Suggested Power Sources

- Maxstar® 150 STL/STH* (pg 39)
- Maxstar® 200 SD/DX/LX (pg 40)
- Maxstar® 350/700 (pg 41)
- Dynasty® 200 SD/DX (pg 42)
- Dynasty® 350/700 (pg 43)
- Syncrowave® 250 DX (pg 44)
- Syncrowave® 350 LX (pg 44)
- PipeWorx™ Welding System (may require separate kit, see pg 54)

*Requires Adapter Cord #300 507. Note: If your power source is not listed, visit MillerWelds.com/wireless to check compatibility.

Most Popular Accessories

- Replacement Easy-Glide Wear Pad™
- Replacement Battery Box #249 297 popular Miller options and accessories.

Model/Stock Number	Component	Power Supply	Battery Life	Rated Range*	Temperature	Radio Frequency	RF Power	Antenna	Dimensions	Weight
Wireless Foot Control System (#300 429)	Foot Control (Transmitter)	(3) AA Batteries	250 hrs	90 ft (27.4 m)	-13°F to +158°F (-25°C to +70°C)	2.4 Ghz (ISM Band)	<3 mW	Internal	H: 6 in (152 mm) W: 5¾ in (146 mm) D: 11½ in (292 mm)	3 lb (1.4 kg) w/Batteries
	14-Pin Receiver	10-35 V AC or DC	N/A						D: 3½ in (89 mm) Dia: 1½ in (38 mm)	0.16 lb (0.07 kg)



WEWLO Wireless Remote Hand Control

See Literature No. AY/6.6

The Wireless Remote Hand Control, designed for Stick, TIG, MIG and Flux Cored welding, allows the operator to adjust parameters for different joint configurations, electrodes and wire types/sizes at the point of use instead of walking back to the machine.



*Some applications are not suitable for wireless communication. Keep in mind that the rated range is subjective, and depends on factors such as obstructions, frequency interference, transmission technology, and weather. The figures listed assume ideal conditions are present.

Improves productivity by allowing parameter adjustments up to 300 ft away from welder without returning to the machine or calling for assistance.

Improves weld quality. Operators can easily adjust their machines to optimize the parameters for different joint configurations, electrodes, and wire types and sizes.

Improves safety by eliminating control cord and reducing potential trip hazard.

Reduces maintenance time and cost. No cord repairs.

Smart Touch™ buttons increase or decrease machine parameters in 1% or 5% increments, for quick and accurate adjustments.

Multiple frequency sharing allows up to 20 systems to operate in a 90-ft (27.4 m) radius with accuracy and precision and without delay, system interference, or crosstalk.

Easy-to-install receiver plugs directly into the 14-pin receptacle of Miller machines.

Easily programmable. Control can be quickly and easily paired with any other Miller 14-pin wireless receiver.

Digital meter display allows presetting percentage of machine output before welding, and viewing amperage and voltage while welding.

High-visibility color makes hand control easy to locate on the job site.

- #248 274 (sold individually)
- See your Miller distributor for other

	d	ustrial	
J		uou iui	

Processes

- TIG (GTAW) Pulsed TIG (GTAW-P)
- Stick (SMAW) MIG (GMAW)*
- Flux Cored (FCAW)?

*Only with voltage-sensing feeder.

Comes Complete With

- · Wireless hand control transmitter
- Wireless 14-pin receiver
- · Battery box with 3 AA batteries
- Belt clip

Suggested Power Sources

- Gold Star® Series (pg 34)
- CST[™] 280 (pg 36)
- Maxstar® (except STR) (pg 40/41)
- Dynasty® (pg 42/43)
- Dimension[™] Series (pg 49)
- XMT® Series (except VS) (pg 50/51)
- Trailblazer® (pg 64/65)
- Big Blue® 300 Pro (pg 67)
- Big Blue® 350 PipePro® (pg 68)
- Big Blue® 400 Eco Pro (pg 69)

Note: If your power source is not listed, visit MillerWelds.com/wireless to check compatibility.

Most Popular Accessories

- Replacement Belt Clip #249 233
- Replacement Battery Box #249 297

Model/Stock Number	Component	Power Supply	Battery Life	Rated Range*	Temperature	Radio Frequency	RF Power	Antenna	Dimensions	Weight
Wireless Hand Control System (#300 430)	Hand Control (Transmitter)	(3) AA Batteries	250 hrs	300 ft (91 m)	-13°F to +158°F (-25°C to +70°C)	2.4 Ghz (ISM Band)	<3 mW	Internal	H: 5 in (127 mm) W: 2¾ in (70 mm) D: 1¾ in (35 mm)	0.6 lb (0.27 kg) w/Batteries
	14-Pin Receiver	10 – 35 V AC or DC	N/A						D: 3½ in (89 mm) Dia: 1½ in (38 mm)	0.16 lb (0.07 kg)



MULTIPROCESS



Multiprocess Power Sources and Packages for Demanding **Industrial Applications**

GOOD BETTER BEST



Shopmate/22A

Dimension/S-74D

Dimension NT 450/S-74D XMT/SuitCase®

MillerWelds.com/Multiprocess

	Source	250 A	300	Amp		350 Amp			650 Amp		
Weldin Perfor	g mance	Shopmate [™] 300 DX (1-Phase) (Pg 49)	Dimension™ 302 (Pg 49)	XMT [®] 304 CC/CV (Pg 50)	XMT [®] 350 VS (Pg 50)	XMT [®] 350 CC/CV (Pg 50)	XMT [®] 350 MPa (Pg 51)	Dimension™ 452 (Pg 49)	Dimension™ NT 450 (Pg 53)	XMT [®] 456 CC/CV (Pg 50)	Dimension™ 652 (Pg 49)
	Mild Steel	•	•	•	•	•	•	•	•	•	•
Material	Stainless Steel	•	O	•	•	•	•	O	•	•	
	Aluminum*	•		•	•	•	•	O	•	•	
	Gauge (.020 – .125)	•	•	•	•	•	•	•	•	•	
Material	Sheet (.125 – .375)	•	•	•	•	•	•	•	•	•	•
Thickness	Plate (.375 – 1 in)							•	•	•	•
	Plate (1+ in)							•	•	•	•
	.030	•	•	•	•	•	•	O	•	•	
	.035	•			•			•		•	
	.045							•		•	
Wire Size	.052							•			
	1/16							•		•	
	5/64							•		•	
	3/32								O	O	
	Short Circuit	***	**	***	***	***	***	**	***	***	
	Pulsed Spray			Optional **		Optional **	***			Optional **	
Process	Stick	***	**	***	***	***	***	**	***	***	**
	TIG	***	*	***	***	***	***	*	***	***	*
	CAC-A	3/16"	1/4"	1/4"	5/16"	5/16"	5/16"	5/16"	5/16"	3/8"	3/8"

ICON KEY

CAPABILITY: • Designed for • Capable of *XR Push-Pull System recommended for best results.

PROCESS QUALITY: ★ Good ★★ Better ★★★ Best ★★★★ Optimized





MULTIPROCESS



Shopmate[™] 300 DX see Literature No. DC/12.7

An economical single-phase DC multiprocess power source that provides versatility and outstanding arc performance in CV mode (MIG) and CC mode (Stick and TIG).



Process selector switch is an "operator-friendly" single process switch that eliminates the confusion of several switch combinations.

Digital meters for presetting or monitoring welding voltage in CV mode and amperage in CC mode.

Built-in 10-pin connector for direct hookup of Spoolmatic® spool guns.

Built-in 14-pin connector provides auick, direct connection for 14-pin. 24 VAC Miller wire feeders and accessories.

Fan-On-Demand™ cooling system operates only when needed.

Line voltage compensation keeps welding parameters constant even when input voltages change ±10%.

Arc control adjusts inductance in MIG mode and DIG in Stick mode to optimize weld performance.

Lift-Arc™ start provides DC TIG arc starting without the use of high frequency. Starts the arc without contaminating the weld with tungsten.

Light Industrial •

Processes

- MIG (GMAW)
- Flux Cored (FCAW)
- DC Stick (SMAW)
- DC TIG (DC GTAW)

MIG Pkg Comes Complete With

- Power source
- 22A wire feeder with Bernard® gun
- MIG kit

Most Popular Accessories

- Shopmate Running Gear/ Dual Cylinder Rack #300 145 (pg 88)
- Shopmate 300 Kit #300 150 (pg 91)

See your Miller distributor for other popular Miller options and accessories.

Stock Number

(#907 315) 200(208)/230 V (#907 316) 230/460/575 V

(#951 076) 200(208)/230 V w/MIG Pkg (#951 077) 230/460/575 V w/MIG Pkg

Kange	
5-400	

Amperage

Rated Output Range 250 A at 30 VDC, 10 - 3560% Duty Cycle

Voltage

Amps Input at Rated Load Output, 60 Hz 208 V 230 V 460 V 575 V KVA KW

Max. Open-Circuit Voltage 80 VDC

Dimensions (includes lift eye) H: 241/2 in (622 mm) W: 19 in (483 mm) D: 251/2 in (648 mm)

177 lb (80.3 kg)

Weight

Dimension™ Series

See Literature No. DC/19.2

"Good!" multiprocess solution delivers dependable performance in demanding applications and combines with the 70 Series wire feeder for a complete welding solution.



Build your own system at MillerWelds.com/equiptoweld (see pg 19) or see package options below.



DC multiprocess versatility with excellent arc performance in CV (MIG) and CC (Stick, TIG, CAC-A).

Digital voltage control (DVC) enables operator to preset voltage in the CV mode prior to welding.

Arc control for Stick applications allows operators more flexibility when welding in tight areas where sticking electrodes is a problem.

Hot Start™ makes it easy to start difficult electrodes.

Line voltage compensation keeps welding parameters constant even when input voltages change ±10% throughout the day.

Fan-On-Demand™ cooling system operates only when needed. Reduces contaminants drawn into the machine and reduces excess noise.

Power efficient for exceptional return on your investment.

Digital meters display voltage and amperage while welding and also display preset voltage in CV mode.

Heavy Industrial

- **Processes**
- MIG (GMAW) • Stick (SMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- Air Carbon Arc
- Cutting and Gouging (CAC-A)

Most Popular Accessories

- SuitCase® X-TREME™ Wire Feeders (pg 25)
- 70 Series Wire Feeders (pg 30)
- Standard Running Gear #042 886 (pg 88)
- Standard Cylinder Rack #042 887 (pg 88)
- Industrial MIG 4/0 Kit #300 390 (pg 91)
- Extension Cables (pg 96)
- Bernard[®] and Tregaskiss™ MIG Guns When purchasing components separately please see your Miller distributor or visit MillerWelds.com/equiptoweld for other

popular Miller options and accessories.

*More models are available — see our Web site or Literature No. DC/19.2.

**Dimensions and weight are for power source only — includes lift eye and strain relief.

Model*	Stock Number	Welding Mode	Amperage/ Voltage Range	Rated Output				Output, 575 V			Max. Open- Circuit Voltage	Dimensions**	Net Weight**
Dimension	(#903 216) 230/460/575 V, Machine only	CC	15-375 A	300 A at 32 VDC,	57.5	50	25	20	20	12.9	60 VDC	H: 30 in (762 mm)	361 lb
302	(#951 272) 230/460/575 V, Stationary Pkg (#951 276) 230/460/575 V, MIGRunner Pkg	CV	10-32 V	100% Duty Cycle	69	60	30	24	23.7	13.4	36 VDC	W: 23 in (585 mm) D: 30½ in (775 mm)	(164 kg)
Dimension 452	(#903 255) 230/460/575 V, Machine only	CC	20-565 A	450 A at 38 VDC,	91	79	39	31	31.4	22	65 VDC	H: 30 in (762 mm)	424 lb (192 kg)
402	(#951 273) 230/460/575 V, Stationary Pkg (#951 277) 230/460/575 V, MIGRunner Pkg	CV	10-38 V	100% Duty Cycle	104	90	45	36	35.3	22.3	43 VDC	W: 23 in (585 mm) D: 38 in (966 mm)	(192 kg)
Dimension 652	(#903 379) 230/460/575 V, Machine only	CC	50-815 A	650 A at 44 VDC,	_	126	63	50.4	50	34.8	72 VDC	H: 30 in (762 mm)	545 lb (247 kg)
002	(#951 274) 230/460/575 V, Stationary Pkg (#951 278) 230/460/575 V, MIGRunner Pkg	CV	10-65 V	100% Duty Cycle							67 VDC	W: 23 in (585 mm) D: 38 in (966 mm)	(241 KY)

NT® Series 304 CC/CV and 456 CC/CV — See Literature No. DC/18.8 350 CC/CV, 350 MPa and 350 VS — See Literature No. DC/18.83

The proven "Best!" performer in portable multiprocess inverter applications.



Except 350 VS model. See pages 46 and 47 for



Wind Tunnel Technology™ protects electrical components and PC boards from contamination.

XMT 304 CC/CV

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and amount of contaminants pulled through machine.

Lift-Arc™ allows TIG starting without the use of highfrequency. Starts the arc without contaminating the weld with tungsten.

Adaptive Hot Start™ increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

Inverter arc control technology provides greater puddle control for superior 6010 Stick electrode performance.

Line voltage compensation keeps power constant even if power input varies by ±10%. XMT 350 models further expand line voltage compensation to an amazing +37% and -59% when operating on 460 VAC.

Process selector switch reduces the number of control setup combinations without reducing any features.

Large, dual digital meters are easy to view and presettable to ease setting weld output.

Ultra-tough, polycarbonate-blended cover for control panel protects front controls from damage. XMT 304 and 350 models only.

Pulsed MIG with optional Optima™ control reduces spatter and distortion, allows better out-of-position puddle control, and provides potential reduction of fume particle emissions. Optima control can be used with XMT CC/CV models only. Pulsed MIG is built-in on XMT 350 MPa and is not available on XMT 350 VS.

Lightweight, aerospace-grade aluminum case offers protection with the benefit of reduced weight.

115 VAC auxiliary power provides 10 amps of circuitbreaker-protected power for water circulators, etc. Standard on XMT 456 and optional on XMT 304. XMT 350 CC/CV and XMT 350 MPa. Not available on XMT 350 VS.

Processes

- MIG (GMAW)
- Pulsed MIG (GMAW-P)*
- Stick (SMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- · Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons - 304: 1/4 in, 350: 5/16 in. 456: 3/8 in)
- *XMT 350 MPa. XMT CC/CV models with optional control. Not available on VS model.

Most Popular Accessories for non-VS Models

- XR-AlumaFeed™ Feeder for aluminum (XMT 350 MPa only) #300 509 (pg 13)
- SuitCase® RC Feeders (pg 26)
- Spoolmatic® 30A/WC-24 (pg 28)
- XR™-Controls (pg 29)
- 22A and 24A Feeders (pg 30)
- 70 Series MPa Plus Feeders (XMT 350 MPa only) (pg 31)
- Optima™ MIG Pulse Control #043 389 (pg 91)
- Current Sensor (XMT 456 only) #194 807 (Field)

Most Popular Accessories for VS Model

• Spoolmatic® 30A/WC-115A (with contactor) (pg 28)

Most Popular Accessories for all Models

- SuitCase[®] X-TREME[™] VS Feeders (pg 25)
- XMT® Rack (pg 57)
- Cylinder Cart #042 537 (pg 87)
- Universal Cart and Cylinder Rack (XMT 304/350 only) #042 934 (pg 87)
- MIGRunner™ Cart (XMT 304/350 only) #195 445 (pg 88)
- Running Gear Cylinder Rack (XMT 456 only) #300 408 (pg 88)
- Coolmate[™] Coolant System (pg 89)
- Protective Cover (XMT 304/350 only) #195 478 (pg 95)
- Bernard® Q-Gun™

*Wire feeders include	le Bernard® MIG gun.
-----------------------	----------------------

^{**}Duty cycle rating below achieved with 6 gauge input power cord (8 gauge cord supplied with unit).

Model	Stock Number	Input Power	Amperage/ Voltage Ranges	Rated Output		Input a 230 V				60 Hz KVA KW	Max. Open- Circuit Voltage	Dimensions	Net Weight
XMT 304 CC/CV	(#903 471) 208-230/460 V (#903 471-01-1) 208-230/460 V w/Aux. Pwr.	Three- Phase	CC Mode: 5-400 A CV Mode: 10-35 V	300 A at 32 VDC, 60% Duty Cycle	33.7	30.5	17	18.9	15.2	12.2 11.6	90 VDC	H: 17 in (432 mm) W: 12½ in (318 mm)	79.5 lb (36.1 kg)
(w/Dinse)	(#903 473) 460/575 V (#951 343) 208/230/460 V MIGRunner w/22A*	Single- Phase		225 A at 29 VDC, 60% Duty Cycle	52.4	47.4	-	24.5	_	11.3 7.6		D: 24 in (610 mm)	
XMT 350 CC/CV	(#907 161) 208-575 V (#907 161-01-1) 208-575 V w/Aux. Pwr.	Three- Phase	CC Mode: 5-425 A CV Mode: 10-38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2 13.6	75 VDC	H: 17 in (432 mm) W: 12½ in (318 mm)	80 lb (36.3 kg)
(w/Dinse)	(#951 305) 208-575 V w/SuitCase X-TREME 12VS*	Single- Phase		300 A at 32 VDC, 60% Duty Cycle**	60.8	54.6	29.7	25.4	19.9	11.7 11.2		D: 24 in (610 mm)	
XMT 350 VS	(#907 224) 208–575 V (CC/CV inverter ideal for construction — no remote	Three- Phase	CC Mode: 5-425 A CV Mode: 10-38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2 13.6	75 VDC	H: 17 in (432 mm) W: 12½ in (318 mm)	80 lb (36.3 kg)
(w/Tweco®)	control, order mating Tweco connectors separately) (#951 306) 208–575 V w/SuitCase X-TREME 8VS*	Single- Phase		300 A at 32 VDC, 60% Duty Cycle**	60.8	54.6	29.7	25.4	19.9	11.7 11.2		D: 24 in (610 mm)	
XMT 456 CC/CV (w/Stud ½")	(#907 010) 230/460 V (#907 010-01-1) 230/460 V w/Remote On/Off (#907 011) 575 V	Three- Phase	CC Mode: 5-600 A CV Mode: 10-38 V	450 A at 38 VDC, 100% Duty Cycle; 565 A at 43 VDC, 60% Duty Cycle	_	50.8	31	27.8	24.4	21.2 19.2	95 VDC	H: 17 in (432 mm) W: 14½ in (368 mm) D: 26 in (660 mm)	118 lb (53.5 kg)

Heavv Industrial XMT 456 co DC

MULTIPROCESS (2)

XMT® 304 CC/CV Additional Features

Auto-Link® circuit automatically links the power source to primary voltage being applied (230/460 or 460/575 VAC, single- or three-phase).

Dinse-style weld disconnects provide high-quality weld cable connections (two connectors supplied with each unit).

XMT® 350 Additional Features

CC/CV, MPa and VS models available. See MPa model below for built-in Pulsed MIG features. VS model is capable of both CV and CC operation, but has a simple four-position front panel *without remote control receptacle. Ideal for construction.*



Allows for any input voltage hook-up (208–575 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Reduced OCV operation—an internal dip switch enables reduced opencircuit voltage Stick welding capability. OCV is typically below 15 volts.

Auto Remote Sense™ enables unit to automatically use remote control if connected to remote control receptacle *CC/CV* and *MPa models only*.

Dinse- or Tweco®-style weld disconnects provide high-quality weld cable connections (two connectors supplied with each unit). *VS model has Tweco connections only.*

Optional gas solenoid kit (#195 286) for TIG welding. Works with VS and non-VS models.

XMT[®] 456 CC/CV Additional Features

Unique case design helps protect internal components from dirt and dust. To connect input power cord and/or set unit up for correct input power, remove the easy-to-handle panel (1/3 case). The remaining two-thirds of the case never needs to be removed!

Primary voltage display shows what primary voltage the power source is set for without removing the side panels. Saves time and assures you that the power source has been correctly set for available input voltage.

Optional 230/460 V model with remote on/off (#907 010-01-1) provides ability to turn power source on or off when it is located away from your work.

XMT® 350 MPa Additional Features

Superior Pulsed MIG welding capabilities with simpleto-use multiprocess controls. Reliable inverter design combines with the SuitCase® X-TREME™ feeders to provide the industry's "Best!" portable solution.



*Wire feeders include Bernard® MIG aun.

**Duty cycle rating below achieved with 6 gauge input power cord (8 gauge cord supplied with unit).

XMT 350 MPa takes the features of the XMT 350 CC/CV multiprocess inverter and adds built-in Pulsed MIG capabilities.

- Easy-to-use Pulsed MIG, including programs for exotic alloys
- Eliminates need for separate pulse control pendant or other pulse controls
- Pulsed MIG works with voltage sensing, remote control and benchtop wire feeders

MPa — **MIG**; **P**ulsed; **a**dvanced Arc Control. Easy-to-use advanced arc control enables an improved Pulsed MIG welding arc.

Built-in Pulsed MIG programs contain optimal parameters for steel, metal core, stainless, aluminum, nickel, silicon bronze and copper nickel wire. Just dial in wire and gas type. As easy to use as traditional MIG, the MPa's intuitive programming virtually eliminates the Pulsed MIG learning curve for experienced MIG operators.

SharpArc® controls the arc in Pulsed MIG mode and gives total control over the arc cone shape, puddle fluidity and bead profile.

Synergic Pulsed MIG — The XR-AlumaFeed™ feeder for aluminum welding or the S-74 MPa for steel give you the benefit of a Synergic Pulsed MIG system. As you increase/decrease the wire feed speed, the pulse parameters increase/decrease, matching the right amount of power output to match the wire speed.

Additional systems available, please visit MillerWelds.com

Model	Stock Number*	Input Power	Amperage/Voltage Range	Rated Output						60 Hz KVA KW	Max. Open- Circuit Voltage	Dimensions	Net Weight
XMT 350 MPa (w/Dinse except	(#907 366) 208-575 V (#907 366-01-1) 208-575 V w/Aux. Pwr. (#907 366-01-4) 208-575 V w/Tweco (#951 307) 208-575 V w/SuitCase 8RC*	Three- Phase	CC Mode: 5-425 A CV Mode: 10-38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2 13.6	75 VDC	H: 17 in (432 mm) W: 12 ¹ / ₂ in (318 mm)	80 lb (36.3 kg)
where noted)	(#951 308) 208–575 V w/SuitCase X-TREME 8VS* (#951 309) 208–575 V w/SuitCase 12RC* (#951 310) 208–575 V w/SuitCase X-TREME 12VS* (#951 294) 208–575 V w/XR-AlumaFeed and air-cooled XR-Aluma-Pro Gun	Single- Phase		300 A at 32 VDC, 60% Duty Cycle**	60.8	54.6	29.7	25.4	19.9	11.7 11.2		D: 24 in (610 mm)	



NEW! XMT® WCC System see Literature No. DC/18.87

The WCC (Weld Cable Control) System matches an XMT 350 or XMT 456 multiprocess welding inverter with a WCC Control to provide remote voltage control for MIG/Flux Cored welding when used with a SuitCase X-TREME WCC voltage-sensing feeder.



Provides remote voltage control when using a voltage-sensing (VS) WCC feeder. Simplifies system setup and improves productivity. With a WCC-equipped VS feeder and power source you can change the output voltage at the feeder and save a trip to the power supply. No extra control cable to purchase, maintain, string or unstring — saving time and money. WCC also extends remote control capability beyond the reach of a control cable system (+100 ft).

Built specifically for the construction and shipbuilding industries where the power source and feeder are separated by hundreds of feet.

Improves productivity and quality control. Allows welders to easily adjust and set optimal voltage at the point of use. Reduces the need to leave the work area and travel back to the power source.

Improves safety and eliminates wear and damage **problems** associated with the control cable.

- *Duty cycle rating below achieved with 6 gauge input power cord (8 gauge cord supplied with unit).
- **Dimensions and weight are for power source only.

Ez-Bind™ feature

- · Easily create a remote control connection. Prior to welding, hold the gun trigger for 5 seconds to establish a connection between the feeder and power supply via the weld cable.
- Connects the SuitCase VS WCC to any WCC-equipped power source or WCC Control for remote voltage control. Feeders and power supplies can be mixed and matched.
- · Works with multiple WCC systems connected to the same work piece.

See pg 50-51 for XMT power source features and pg 25 for SuitCase X-TREME VS feeder features.





Scan this tag to view XMT WCC videos.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.

Heavv Industrial XMT 456 co DC

Processes

- MIG (GMAW)
- Stick (SMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- · Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons - 350: 5/16 in. 456: 3/8 in)

System Package Includes

- XMT 350 CC/CV with Tweco connections **OR** XMT 456 CC/CV with ring lugs
- WCC Control with input connections matched to power source and Tweco output connections
- SuitCase X-TREME 8VS OR 12VS WCC feeder
- · Bernard Q300 gun

Power Source Package Includes

- XMT 350 CC/CV with Dinse or Tweco connections **OR** XMT 456 CC/CV with ring lugs
- WCC Control with input connections matched to power source and Dinse or Tweco output connections

Most Popular Accessories

- XMT® Rack (pg 57)
- Cable Connectors and Adapters (pg 87)
- Cylinder Cart #042 537 (pg 87)
- Universal Cart and Cylinder Rack (XMT 350 only) #042 934 (pg 87)
- MIGRunner[™] Cart (XMT 350 only) #195 445 (pg 88)
- · Running Gear Cylinder Rack (XMT 456 only) #300 408 (pg 88)
- Protective Cover (XMT 350 only) #195 478 (pg 95)

Model/Stock	Number	Input Power	Amperage/ Voltage Ranges	Rated Output				Load (460 V		60 Hz KVA KV	Max. Upen Circuit V Voltage	Dimensions**	Net Weight**	
XMT 350 CC/CV	(#951 364) System Package with 8VS feeder (Tweco®) (#951 365) System Package with 12VS feeder (Tweco®)	Three- Phase	CC Mode: 5-425 A	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2 13	.6 75 VDC	H: 17 in (432 mm) W: 12½ in (318 mm)	80 lb (36.3 kg)	
208–575 V	(#951 361) Power Source Package (Dinse) (#951 361) Power Source Package (Tweco®)		CV Mode: 10-38 V	300 A at 32 VDC, 60% Duty Cycle*	60.8	54.6	29.7	25.4	19.9	11.7 11	.2	D: 24 in (610 mm)		
XMT 456 CC/CV 230/460 V	(#951 366) System Package with 8VS feeder (Tweco®) (#951 367) System Package with 12VS feeder (Tweco®) (#951 362) Power Source Package (Dinse) (#951 363) Power Source Package (Tweco®)	Three- Phase	CC Mode: 5-600 A CV Mode: 10-38 V	450 A at 38 VDC, 100% Duty Cycle; 565 A at 43 VDC, 60% Duty Cycle	_	50.8	31	27.8	24.4	21.2 19	.2 95 VDC	H: 17 in (432 mm) W: 14½ in (368 mm) D: 26 in (660 mm)	118 lb (53.5 kg)	

Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
SuitCase X-TREME 8VS WCC Feeder only (#951 323) w/Bernard® Q300 gun	Operates on open-circuit voltage and arc voltage:	330 A at 60% Duty Cycle	50-780 IPM (1.3-19.8 m/min) Actual range in CC mode is	Solid Wire .023 – .062 in (0.6 – 1.6 mm) Flux Cored .030 – .062 in (0.8 – 1.6 mm)	8 in (203 mm), 14 lb (6.4 kg)	H: 12¾ in (324 mm) W: 7¼ in (184 mm) D: 18 in (457 mm)	28 lb (13 kg)
SuitCase X-TREME 12VS WCC Feeder only (#951 322) w/Bernard® Q300 gun (#951 321) w/Bernard® Dura-Flux™ gun	14-48 VDC/ 110 Max. OCV	425 A at 60% Duty Cycle	dependent on arc voltage applied	Solid Wire .023-5/64 in (0.6-2.0 mm) Flux Cored .030-5/64 in (0.8-2.0 mm)	12 in (305 mm), 45 lb (20 kg)	H: 15½ in (394 mm) W: 9 in (229 mm) D: 21 in (533 mm)	35 lb (15.9 kg)



MULTIPROCESS



Dimension[™] NT 450

See Literature No. DG/19.5

A new generation of hybrid welding technology that improves arc starting and welding performance. Combining this power source with 70 Series wire feeders offers a "Better!" solution for industrial market applications.

Build your own system at **MillerWelds.com/equiptoweld** (see pg 19) or see package options below.





Dimension NT 450 (#907 256)Build your own system at MillerWelds.com/equiptoweld.

DC multiprocess flexibility with outstanding arc performance in all welding processes.

Digital meters allow presetting of voltage or amperage prior to welding in all modes for more precise welding control.

Electronic arc control with digital display gives operator added flexibility on a variety of Stick electrodes.

Electronic inductance control with digital display reduces spatter and gives operator added control on a larger variety of welding wires.

Line voltage compensation keeps welding parameters constant even when input voltages change ±10%.

Fan-On-Demand™ cooling system operates only when needed. Reduces contaminants drawn into the machine and reduces excess noise.

Power efficient for exceptional return on your investment.

Help codes to help troubleshoot and service power source. Codes are displayed on the volt/amp meters and help reduce service time.



Dimension NT 450 Stationary Package (#951 275)Stationary display without running gear/cylinder rack.

Comes complete with:

- Dimension NT 450 power source
- S-74D wire feeder with drive rolls
- Bernard[®] Q-Gun[™]
- Industrial MIG 4/0 Kit (see listing at right for kit contents)



Dimension NT 450 MIGRunner™ Package (#951 279) MIGRunner system with factory-installed running gear/cylinder rack.

Comes complete with everything in Stationary Package plus:

· Factory-installed running gear/cylinder rack

Heavy Industrial

CV DC 3

Processes

- MIG (GMAW)
- Stick (SMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A)



Most Popular Accessories

- SuitCase® X-TREME™ Wire Feeders (pg 25)
- 70 Series Wire Feeders (pg 30)
- Standard Running Gear #042 886 (pg 88)
- Standard Cylinder Rack #042 887 (pg 88)



 Industrial MIG 4/0 Kit #300 390 (pg 91)

Includes Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.

- Remote Controls (pg 95)
- Extension Cables (pg 96)
- Air Filter Kit #042 939
- Bernard[®] and Tregaskiss[™] MIG Guns

When purchasing components separately please see your Miller distributor or visit **MillerWelds.com/equiptoweld** for other popular Miller options and accessories.

*Mhile idling	**Dimensions and	woight ar	a for nowar	cource	only_	includes	lift ava	and o	etrain	raliaf

Stock Number	Amperage Range	Voltage Range	Rated Output		Max. Open- Circuit Voltage	Dimensions**	Net Weight
(#907 256) 230/460/575 V, Machine only (#951 275) 230/460/575 V, Stationary Pkg (#951 279) 230/460/575 V, MIGRunner Pkg	5-500 A in CC mode	10-38 V in CV mode	450 A at 38 VDC, 100% Duty Cycle	57 29 23 22.6 21.0 2.18* 1.04* 0.84* 0.87* 0.29*	80 VDC	H: 32½ in (826 mm) W: 23 in (585 mm)	376 lb (171 kg)

PipeWorx™ Welding System

Optimized for pipe fabrication shops.

PipeWorx Welding System (Includes feeder drive rolls. Filler metal sold separately.) 230/460 V system (#951 381) shown. 575 V system (#951 382) also available.





Requires PipeWorx Wireless Remote Control Kit #300 859 for PipeWorx Systems purchased before March 2011. See pages 46 and 47 for wireless remote controls.

Now Available!

PipeWorx Memory Card, Accu-Power #300 667.

Displays instantaneous power during welding to meet the new ASME Requirement for calculating heat input on complex waveform processes (RMD and Pro Pulse). Requires version 1.07 software minimum.

Free PipeWorx Welding System CD

Showcases the features and benefits of PipeWorx Welding System and new pipe welding techniques. Visit PipeWorx page at MillerWelds.com/pipeworx to order your CD today.

Simple Process Setup

- The front panel was designed by welders for welders.
- · Requires just a few basic steps to set up a new weld process, resulting in less training time and minimizing errors from incorrect setups.
- Memory feature stores 4 programs for each selection: Stick, DC TIG, and MIG (left and right side of feeder). Eliminates the need to remember parameters.

Multiprocess Machine

- · Weld processes are optimized to deliver superior arc performance and stability specifically for root pass, fill and cap pipe welding.
- RMD™ and Pro-Pulse™.

Quick Process Changeover

- No need to manually switch polarity or cables and hoses between processes. Simply push a process selection button to choose a welding process. PipeWorx "Quick-Select" technology automatically selects the welding process, the correct polarity, cable outputs and user programmed welding parameters.
- Quick process changeover eliminates set-up time for switching cables and gas hoses. Also, reduces the risk of weld reworks due to incorrect cable connection.

Streamlined System

- Wind Tunnel Technology[™] and Fan-On-Demand[™] provide system protection in the dusty shop environment.
- · All system components have been selected to meet the needs of a pipe fabrication shop.

RMD™ (Regulated Metal Deposition).

Precisely controlled short-circuit metal transfer process provides a calm, stable arc and weld puddle for less chance of cold lap or lack of fusion, less spatter and a higher quality root pass on pipe.



RMD Carbon Steel

100% Duty Cycle

The stability of the weld process lessens the need for puddle manipulation and is more tolerant to hi-lo conditions, reducing training requirements. Weld bead profiles are thicker than conventional root passes which can eliminate the need for a hot pass. In some stainless steel applications, it may be possible to eliminate the backing (purge) gas to further improve productivity and reduce welding costs.

11 A

*Dimensions and weight are for power source only.

Pro-Pulse™ Pulse welding method that provides a shorter arc length, narrower arc cone and less heat input than traditional spray pulse transfer. Closed-loop process control virtually eliminates arc wander and variations in tip-to-work



Pro-Pulse Stainless

(arc length) distance, providing easier puddle control and less training time. Also improves fusion and fill at the toe of the weld, for higher travel speeds and deposition. This process coupled with RMD for root passes permits procedures using the same wire and gas, eliminating process switch-over time.

Heavy Industrial



Processes

- Stick (SMAW)
- DC TIG (GTAW) (HF and Lift-Arc™)
- MIG (GMAW)
- MIG RMD™ (GMAW MSC)
- Pro-Pulse™ (GMAW-P)
- Flux Cored (FCAW)

PipeWorx Welding System Comes Complete With

- Power source with cable hangers #907 382 or #907 384
- Running gear and handles #300 368
- Dual feeder with drive rolls #300 366
- · Cable kit with 25 ft (7.6 m) work sense lead #300 367
- Two 15 ft (4.6 m) PipeWorx 300 guns #195 400

Most Popular Accessories

- PipeWorx Accessories Kit for Dual Feeder #300 568 Includes 25 ft work cable, EG500 work clamp, two Smith® regulator/ flowmeters, and two 4 ft gas hoses.
- Cable Kit #300 367 For feeder used on power source. Includes feeder cable, weld cable and 25 ft work sense lead.
- Composite Cable Kit 25 ft (7.6 m) #300 454 50 ft (15.2 m) #300 456 For remote feeder applications. Includes composite cable which encases feeder cable, gas hose and weld cable in protective sheath, and either 25 or 50 ft work sense lead.
- PipeWorx Running Gear #300 368 Includes gas cylinder rack and handles.
- Feeder Cart #300 467 For remote feeder applications. Includes consumables drawer.
- PipeWorx Cooler #300 370
- PipeWorx Remote Feeder Interface w/gun triggers and cable #300 597
- Spool Cover #057 607 For single or left side of dual feeder.
- Spool Cover #090 389 For right side of dual feeder.
- DSS-9 Dual Schedule Switch #071 833
- RFCS-14 HD #194 744

W: 19 in (483 mm)

D: 29 in (737 mm)

- Foot Control Bracket #300 676
- RPBS-14 On-Off Switch Remote #300 666
- Bernard[®] PipeWorx[™] Guns 15 ft (4.6 m) 250-15 #195 399 15 ft (4.6 m) 300-15 #195 400

See distributor or visit MillerWelds.com for other Miller options and accessories.

Dual 90 lb (41 kg)

Model/Stock Number	Welding Mode/ Process	Amperage/ Voltage Range	Rated Output at 100% Duty Cycle		Input at R t, 60 Hz, 3 460 V		KVA 230 V	460 V	575 V	KW 230 V	460 V	575 V	Max. Open- Circuit Voltage	Dimensions*	Net Weight*
PipeWorx Welding System	CC: Stick	40-350 A	350 A at 34 VDC	37.9	23.2	19.4	15.1	18.5	19.2	13.9	14	14	90 VDC	H: 28 ¹ / ₂ in	225 lb
(#951 381) 230/460 V (#951 382) 575 V	CC/DC: TIG	10-350 A	350 A at 24 VDC	29.3	18.2	13.5	11.8	14.5	13.4	10.7	10.6	10		(724 mm) W: 19 ¹ / ₂ in	(102 kg)
PipeWorx Power Source only (#907 382) 230/460 V (#907 384) 575 V	CV: MIG/ Flux Cored	10-44 V	400 A at 34 VDC	42.9	24	20.5	17.3	19.2	20.5	16	15.8	16.2		(495 mm) D: 31 ³ / ₄ in (806 mm)	
Model/Stock Number	•	nput Welding Circuit Rating	Wire Speed		Wire Di	ameter C	apacity		1	ium Spo apacity		Dimer	nsions	Net Weight	
PipeWorx Feeder only	24 VAC, 1	00 V, 750 A at	50-780 IPM		.0350	62 in (0.9	-1.6 mr	n)	60 lb (27 kg)		H: 14	in (356 mm)	Single 65 I	b (29.5 kg)

(1.3-19.8 m/min)

(#300 365) Single-wire Model

(#300 366) Dual-wire Model

ILTIOPERATOR









MillerWelds.com/Multioperator

Product Guide	Page	Class	Stick	MIG	MIG-P	Flux Cored			CAC-A (1-Unit)	Portability	Weldable Metals	Welding Output Range	Special Features	Typical Applications	
Mark VI™	56	•	•	•					3/16"	Lift eye	Steel, stainless	20-315 A	Up to 6 operators	Construction, fabrication, pipe, shipbuilding	
Mark VIII®-2	56		•						3/16"	Lift eye	Steel, stainless	35-300 A	Up to 8 operators	Construction, fabrication, pipe, shipbuilding	
CST™ 280 Racks	56						•		5/ _{16"} †	Lift eye, optional running gear	Steel, stainless	5-280 A	Up to 4 or 8 operators, lightweight	Construction, maintenance/repair, shipbuilding	
XMT® 304 Rack	57	•		•	•*	•	•	• **	1/4-	Lift eye, optional running gear	Steel, stainless	10-35 V 5-400 A	Up to 6 operators	Construction, fabrication, pipe, maintenance/repair	3-Pha
XMT® 350 VS Rack	57	•		•		•	•		5/16"	Lift eye, optional running gear	Steel, stainless	10-38 V 5-425 A	Up to 6 operators	Construction, fabrication, pipe, maintenance/repair	ase
XMT® 350 CC/CV Rack	57	•		•	•*	•	•	• **	5/16"	Lift eye, optional running gear	Steel, stainless	10-38 V 5-425 A	Up to 6 operators	Construction, fabrication, pipe, maintenance/repair	
XMT® 350 MPa Rack	57	•	•	•	•	•	•	•**	5/16"	Lift eye, optional running gear	Steel, stainless	10-38 V 5-425 A	Up to 6 operators	Construction, fabrication, pipe, maintenance/repair	
Miller Du-Op™ (Engine Drive section)	69						•		3/8"	Lift eye, optional trailer	Steel, stainless	15-600 A	Multioperator engine drive	Construction, rental	

PRODUCT KEY

CLASS:

Light Industrial
Industrial
Heavy Industrial
CAPABILITY:
Designed for this process
Capable of this process
For more detailed information, see individual specification sheets.

Mark VI™ and Mark VIII®-2 See Literature No. DC/9.8 and DC/10.0

Durable, heavy-duty multiple-operator welding systems drive four, six or eight modules from a single main transformer.



Mark VI Features

Multiple capabilities CC or CC/CV. Versatility and outstanding arc welding in both CV (MIG) and CC (TIG and Stick). CC/CV module has a high quality arc for welding with cored wires, CC module has same great arc characteristic as the Gold Star® 302.

Four to six welding modules that can be paralleled for higher output.

Line voltage compensation keeps output constant, even if primary input power varies by ±10%.

Optional Low OCV modules reduce maximum open-circuit voltage to 26 volts in CC and CV modes when not welding.

Mark VI

Mark VIII-2

Mark VIII-2 Features

Eight modules that can be paralleled for higher output.

MagAmp Technology provides excellent arc and puddle control. Multiple CC capabilities. Stick, TIG, Air Carbon Arc cutting and gouging, and Flux Cored welding with a voltage-sensing feeder.

15 amp 115 VAC duplex receptacle allows operators the flexibility to run grinders, drills, coolers, etc. from the power source.

Heavv Industrial

Mark VIII-2 ೯% CC DC उ

Processes

- Stick (SMAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (3/16 in carbons)
- Flux Cored (FCAW) and MIG Spray Transfer (GMAW) with voltage-sensing feeder
- MIG (GMAW) with Mark VI CC/CV units

Most Popular Accessories



- SuitCase® X-TREME™ VS Wire Feeders (pg 25)
- Remote Controls (pg 95)

See vour Miller distributor for other popular Miller options and accessories.

Model	Stock Number	DC Welding Range, Single Module	Rated Welding Output	Amps Input	Max. Open-Circuit Voltage (DC)	Dimensions	Net Weight
Mark VI-2 (4 CC Modules)	(#903 588) 230/460/575 V, 60 Hz	CC: 20-315 A	Single Module 250 A at 44 VDC, 60% Duty Cycle	At 750 Amps Output, 50/60 Hz 230 V 164	CC: 75 VDC	H: 65 in (1.7 m)	Mark VI-2 1575 lb
Mark VI CC (6 CC Modules)	(#903 512) 230/460/575 V, 60 Hz		Main Transformer 1500 A at 44 VDC, 25% Duty Cycle	460 V 82.5 575 V 66.1		W: 56¾ in (1.4 m) D: 34¼ in	(718 kg) Mark VI
Mark VI CC/CV (6 CC/CV Modules)	(#903 645) 230/460/575 V, 60 Hz (#903 645-01-1) Low OCV Module	CC: 20-315 A CV: 10-30 V	750 A at 44 VDC, 100% Duty Cycle	KVA 65.2 KW 41.9	CC: 75 VDC, CV: 38 VDC Low OCV modules: 26 VDC	(0.9 m)	1825 lb (828 kg)
Mark VIII-2	(#901 348) 230/460/575 V	CC: 35-300	Single Module 200 A at 40 VDC, 60% Duty Cycle	At 800 Amps Output, 60 Hz 230 V 170	CC: 80	H: 70 ¹ / ₄ in (1.8 m)	4050 lb (1837 kg)
			Main Transformer 1600 A at 40 VDC, 25% Duty Cycle 800 A at 40 VDC, 100% Duty Cycle	460 V 85 575 V 68 KVA 68 KW 48.6		W: 72 in (1.8 m) D: 40 in (1 m)	

CST™ 280 Racks see Literature No. DC/18.82

Rugged enclosure provides simple means for protecting and transporting multiple welding power sources for construction, maintenance/repair and shipbuilding applications.







CST 280 8-Pack Rack shown.

Light weight and small footprint for easy transportation. The low weight enables the use of elevators to move the rack.

Top cover protects machines from falling debris.

Lift eye simplifies crane or overhead lifting device transport.

Lift truck fork pockets.

One main disconnect box with branched fusing for each machine. Common output ground connection (for same polarity use only). Optional dual rack kit connects two 4-pack CST racks to form an 8-pack rack, utilizing one input power cable and one lift.

Optional rack running gear available for moving the rack.

Heavy Industrial

Processes

- Stick (SMAW)
- TIG (GTAW)
- · Air Carbon Arc Cutting and Gouging (CAC-A) (Paralleled CST 280s: 5/16 in carbons)

Most Popular Accessories

Dual Rack Kit #195 267



- 4-Pack Rack Running Gear #195 114
- · 8-Pack Rack Running Gear #195 436

Model/Stock Number	Rack Capacity	Input Power to Rack	Welding Power Source	Dimensions	Net Weight
4-Pack Rack (#907 247) Tweco®-style (#907 245) Dinse-style	4 units, 8 units with optional dual rack kit	220-230/460-575 V, 50/60 Hz, Three-Phase	CST 280s linked for 460-575 V with Tweco- or Dinse-style connectors. The Dinse-style includes one set of male connectors;	H: 50 ³ / ₄ in (1289 mm) 4-Pack W: 25 ¹ / ₂ in (648 mm)	355 lb (161 kg)
8-Pack Rack (#907 365) Tweco®-style	8 units		the Tweco-style does not. See pg 36 for information on CST 280.	8-Pack W: 46 in (1168 mm) D: 26½ in (673 mm)	640 lb (290 kg)
Empty Rack (#195 051)	4 units	_	Can contain any CST models.	Same as 4-Pack Rack	166 lb (75 kg)



MULTIOPERATOR



XMT 304 and 350 Racks See Literature No. DC/18.81, DC/18.83

XMT Rack conveniently houses multiple inverter power sources for multiple welders. This is an ideal system for onsite applications including construction and shipbuilding.





Except 350 VS rack. See pages 46 and 47 for wireless remote controls.

XMT 350 6-Pack Rack shown.

Custom build your own system by mix and matching Miller's XMT® 304 CC/CV, 350 CC/CV, 350 MPa, 350 VS and 456 CC/CV; and Invision™ 352 MPa, 456MP and 456P. (XMT[®] 456 CC/CV. Invision™ 456MP and 456P maximum of 4 units.)

Both 4-rack and 6-rack models are available with two lift eyes for transportation and rugged skids for dragging or pushing.

Lift truck side and end pockets in base enable loading and work site repositioning with forklift.

Rack roof panel and power source shelves are fabricated from galvanized steel and painted for added protection in harsh environments.

Liquid-tight strain reliefs provided on both welding power source and electrical junction box. Strain relief is designed to resist salt water, alcohol, oil, grease and common solvents.

Isolated work terminal provides a connection point for common workpiece construction.

Meets IP23 which is more stringent than IP23S or IP23M ratings.

One easy connection allows up to six inverters to be connected with one primary power drop.

All racks with factory-equipped power sources include 20 A fuses to provide primary power line protection for each inverter power supply on 460 VAC. (575 VAC operation, if applicable, also utilizes 20 A fuses.

Heavy Industrial

Processes

- MIG (GMAW)
- Pulsed MIG* (GMAW-P)
- Stick (SMAW)
- TIG and Lift-Arc TIG (GTAW)
- Pulsed TIG* (GTAW-P)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (XMT 304: 1/4 in carbons) (XMT 350: 5/16 in carbons) (XMT 456: 3/8 in carbons)

*With optional controls only - not available with XMT 350 VS model. Note: TIG processes not available with Invision models.

Most Popular Accessories



- SuitCase® X-TREME™ VS Feeders (pg 25)
- SuitCase® RC Feeders (pg 26)
- Remote Controls (pg 95)



• Rack Running Gear #195 114

• Fuse Kits

XMT 304/350 (20 A, 460 - 575 V) 4-Pk #220 766/6-Pk #220 765 XMT 304/350 (45 A, 208 – 230 V) 4-Pk #220 764/6-Pk #220 763 XMT 456 (30 A, 460 – 575 V) 4-Pk #220 767

Model	Stock Number with 4 Units	Stock Number with 6 Units	Input Power to Rack	Dimensions	Net Weight
XMT 304 CC/CV Rack	(#907 292) Dinse-style	(#907 291) Dinse-style	230/460 VAC, 60 Hz, Three-Phase (20 A fuses included)	H: 59¾ in	4 Units 560 lb (254 kg)
	(#907 293) Dinse-style	(#907 294) Dinse-style	460/575 VAC, 60 Hz, Three-Phase (20 A fuses included)	(1508 mm) W: 43 in	6 Units 712 lb (323 kg)
XMT 350 VS Rack	(#907 227) Tweco®-style	(#907 228) Tweco®-style	208-575 VAC, 50/60 Hz,	(1092 mm)	4 Units 599 lb (272 kg)
XMT 350 CC/CV Rack	(#907 231) Dinse-style	(#907 232) Dinse-style	Three-Phase (20 A fuses included)	D: 343% in (873 mm)	6 Units 759 lb (344 kg)
	(#907 407) Tweco®-style	(#907 406) Tweco®-style			
XMT 350 MPa Rack	(#907 410) Tweco®-style	(#907 411) Tweco®-style			
Empty Rack	(#195 466) Can contain XMT 304, XM XMT 456 CC/CV or Invision 456 (4 Uni		(Order required fuse kit separately)		279 lb (127 kg)



3 (C |) 3

DRIVEN







MillerWelds.com/EngineDriven

	Product Guide	Page	Class	Stick	MIG	Flux Cored*	AC TIG	DC TIG	PAC** CAC-A	Portability	Weldable Metals	Std. Generator Pwr. (Watts)	Welding Amperage Range	Engine Brand	Special Features	Typical Applications
	Blue Star® 145 and 145 DX	59	•					•		Optional lift eye, running gear	Steel	4500	40-145 DC	Kohler	Compact, portable	Maintenance, service trucks
	Blue Star® 185 DX	59	•									6000	55-185 DC	Kohler	Compact, portable	Maintenance, service trucks
	Wildcat [®] 200	59	•							Lift eye, pickup mount,	Steel	6500	50-200 DC	Subaru	Compact, lightweight	Maintenance, repair, farm/ranch
	Bobcat™ 225	62	•			•				optional running gear,	Steel, alum, stainless	11,000	50-225 AC 50-210 DC	Kohler, Subaru	Cost-effective AC/DC Stick	Maintenance, farm/ranch, construction
Gasoline	Bobcat™ 3 Phase	60	•			•	•					1-Ph/10,500 3-Ph/11,000	50-225 AC 50-210 DC	Kohler	Backup power for pivot irrigation	Farm/ranch
- E	Bobcat™ 250	63	•					•	3/16"			11,000 12,000 with EFI	40-250 CC 90-275 CV	Kohler, Subaru	Industry's most popular engine drive, optional EFI	Fab, maintenance, farm/ranch, construction
	Trailblazer® 275 DC	64							3/16"			11,000 12,000 with EFI	10-275 DC	Kohler, Subaru	Industry's best performing engine drive, optional EFI	Fab, structural, maintenance, repair, piping
	Trailblazer® 302	64	•		•	•	•		3/16"			11,000 12,000 with EFI	30-225 AC 10-325 DC	Kohler, Subaru	Industry's best performing engine drive, optional EFI	Fab, structural, maintenance, repair, piping
	Trailblazer [®] 302 Air Pak [™]	65					•		3/16"			13,000	30-225 AC 10-350 DC	Kohler	AC/DC, CC/CV, 26 CFM air, battery charge/jump start	Service/maintenance, construction
	Bobcat™ 250 Diesel	63	•	•		•			3/16"	optional	Steel, alum, stainless	11,000	40-250 CC 90-275 CV	Kubota	Contractor's choice, AC/DC Stick, strong FCAW	Fab, maintenance, farm, construction
	Trailblazer® 302 Diesel	64			•	•	•	•	3/16"	running gear, trailer		11,000	30-225 AC 10-325 DC	Kubota	Pro's choice, premium arc quality	Fab, structural, maintenance, repair, piping
	Big Blue® 300 Pro	67			•				1/4-	pickup mount,	Steel, stainless	12,000	20-410 DC	Caterpillar, Mitsubishi	Low-speed engine, compact, rugged, quiet	Pipe, structural, construction
_	Big Blue® 350 PipePro®	68						•	1/4-	optional trailer	Steel, stainless	12,000	20-400 DC	Mitsubishi	Premium pipe arc	Pipe, structural
Diesel	Big Blue® 400 Eco Pro	69							● 5⁄16°		Steel, stainless	5500	20-500 DC	Mitsubishi	Compact, fuel efficient	Construction, rental
	Big 40®	70			•				● 5/16"	Lift eye,	Steel, alum, stainless	5500	15-500 DC	Caterpillar	AC/DC on Deluxe model	Construction, rental
	Big Blue® 400	70			•				● 5/16*	generally mounted on	Steel, stainless	5500	15-500 DC	Deutz, Perkins	Engine & process choice	Offshore, construction, rental
	Big Blue® 500	70			•			•	3/8"	optional trailer	Steel, stainless	5500	20-600 DC	Deutz	Engine & process choice	Offshore, construction, rental
	Miller Du-Op®	69	_						1/2"	<u> </u>	Steel, stainless	5500	15-600 DC	Deutz	Multioperator engine drive	Construction, rental
	Big Blue® Turbo	71						•	1/2"		Steel, stainless	5500	20-750 DC	Deutz	Turbo for high altitude	Construction, mining
	Big Blue® Air Pak™	71		•				•	1/2"		Steel, alum, stainless	5500	20-750 DC	Deutz	AC on Deluxe model	Repair, mining, railroad

Why buy a GÁS or DIESEL engine?

Gasoline Advantages

- Lower product cost (by 50 70%)
 Smaller size and less weight
 Less expensive engine repairs

- Better warranties
- Easier cold weather starting

EFI Advantages (vs. Carburetor Models) 12-27% better fuel economy Reduced emissions (approx. 1/3 lower) Easy starting in all climates (no choke) Elimination of carburetor icing Better high altitude performance

- Uses 20 40% less fuel than carburetor gas
 1-1/2 to 2-1/2 times the engine life
 Required on some job sites for safety
 Typically have longer maintenance intervals
 Convenient if other equipment is diesel

PRODUCT KEY

CLASS: Light Industrial Industrial Heavy Industrial CAPABILITY: O Designed for this process Capable of this process New! or Improved! products appear in blue type. "If using self-shielded wire, use CV weld output. "With appropriate Spectrum, see engine-driven product descriptions. For more detailed information, see individual specification sheets.

ENGINE-DRIVEN



Blue Star[®] Series 145, 145 DX, 185 DX see Literature No. ED/2.5

Reliable outdoor portable power! Great for farm, ranch, maintenance, construction and hobbyist.



Compact and portable, its small footprint uses little truck space. Optional running gear also makes the Blue Star one-man portable.

DX models include electric start, 5-gallon fuel capacity, auto-idle and engine hour meter.

Receptacle covers improve reliability by protecting receptacles from debris.

Accu-Rated™ peak generator power is usable for maximum generator loads such as plasma cutting, Millermatic® MIG welders and motor starting.

Light Industrial OCC DC

Processes

• Stick (SMAW) • TIG (GTAW)

Gasoline Engines

Kohler CS10: Blue Star 145/145 DX Kohler CS12.75: Blue Star 185 DX 1-cylinder, 4-cycle, overhead valve, air-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- Millermatic® 140 Auto-Set™ #907 335 (pg 8)
- Millermatic[®] 180 Auto-Set[™] #907 312 (pg 8)
- Lifting Eye #195 353 (pg 90)
- No. 38 Running Gear #195 352 (pg 90)
- Protective Cover #195 193 (pg 90)
- No. 2 Stick Cable Set (pg 94)

See your Miller distributor for other popular Miller options and accessories.

^{*}More models available — see our Web site or Literature No. FD/2.5.

Model	Stock Number*	Welding Mode/Process	Amperage Range	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
Blue Star 145	(#907 266) Kohler Recoil Start, 10 HP at 3600 RPM	CC/DC (Stick/TIG)	40-145	145 A at 25 V, 20% Duty Cycle 100 A at 25 V, 60% Duty Cycle	Peak: 4500 watts Continuous: 4000 watts	H: 22¾ in (578 mm)	263 lb (119 kg)
Blue Star 145 DX	(#907 267) Kohler Electric Start, 10 HP at 3600 RPM	(Suck/Hu)		100 A at 25 V, 60% Duty Gydle	Gontinuous. 4000 watts	W: 223/4 in	309 lb (140 kg)
Blue Star 185 DX	(#907 269) Kohler Electric Start, 12.75 HP at 3600 RPM	CC/DC (Stick/TIG)	55-185	185 A at 25 V, 20% Duty Cycle 130 A at 25 V, 60% Duty Cycle	Peak: 6000 watts Continuous: 5500 watts	(578 mm) D: 31 ⁵ % in (803 mm)	315 lb (143 kg)

Wildcat® 200 See Literature No. ED/3.0

Compact, lightweight, durable and cost effective machine is designed for the contractor and is great for maintenance/repair, farm and ranch applications.



Fully enclosed durable case provides a fully protected engine to ensure long-term engine reliability.

Accu-Rated™ 6500 watts of usable peak power cranks out enough power for many construction, maintenance/repair, and farm/ranch applications. 5500 watts of continuous power.

12 hours of run time is provided by a 7-gallon fuel tank when using a typical 1/8 in Stick electrode.

Tested and rated at 104°F (40°C) to ensure consistent operation of the welder and generator in all climates.

Heavy duty construction ensures protection from rough handling or the elements to keep you making money, rather than spending it.

Compact design takes up less truck space, is 20 inches wide to fit on service truck tool boxes and is only 24 inches tall allowing visibility out of the rear window when truck mounted.

Standard maintenance displays and front panel mounted **engine controls** make the Wildcat easy to service and operate.

CC DC

Light Industrial
Industrial

Processes

• Stick (SMAW) • TIG (GTAW)

Gasoline Engine Subaru EX40

1-cylinder, 4-cycle, overhead cam, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- Millermatic[®] 140 Auto-Set[™] #907 335 (pg 8)
- Millermatic® 180 Auto-Set™ #907 312 (pg 8)
- Spectrum[®] 375 X-TREME[™] Plasma Cutter #907 339 (pg 76)
- Adapter Cord, Full KVA #300 517 (pq 90)
- Wildcat 200 Running Gear #300 532 (pg 90)
- Protective Cover #300 496 (pg 90)

See your Miller distributor for other popular Miller options and accessories.

Note: See gas engine drive comparison chart on page 61. *More models available — see our Web site or Literature No. ED/3.0.

Stock Number*	Welding Mode/Process	Amperage Range	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions
(#907 403) Subaru 14 HP at 3600 RPM	CC/DC (Stick/TIG)	50-200	150 A at 25 V, 100% Duty Cycle 200 A at 25 V, 20% Duty Cycle	Peak: 6500 watts Continuous: 5500 watts	H: 24¾ in (629 mm) W: 20 in (508 mm) D: 35½ in (902 mm)

Net Weight

345 lb (159 kg)

Bobcat[™] 3 Phase

See Literature No. FD/4.33

Designed for farm and ranch owners in need of single- and three-phase power to run 480 V three-phase pivot irrigation systems or to provide backup power for home, farm and ranch.



Accu-Rated™ 11,000 watts of 3-phase (480 V) for irrigation pivot systems or Accu-Rated 10,500 watts of 1-phase (120/240 V) for your house, barn, or on the job tools.

Maintenance displays, fully enclosed case and fuel gauge.

Welding and power ratings are at 104°F (40°C) — highest in its class to ensure reliable performance.

Bobcat 3 Phase is a 11,000 watt generator with Bobcat 225 weld output.



Industrial 🔵 🗠 🕏

Processes

- Stick (SMAW)
- MIG (GMAW)¹
- Flux Cored (FCAW)
- AC²/DC TIG (GTAW)

¹With voltage-sensing feeder only. ²With Dynasty[®] 200 Series or HF-251 (non-critical).

Engines

Gasoline: Kohler CH 23

Twin-cylinder, 4-cycle, OHV, industrial, air-cooled

Note: Engines are warranted separately by engine manufacturer.

See distributor for Miller accessories.

	نه
ı	
Ė	=
	7,
	σ.

Stock Number (**#907 255)** Kohler 23 HP at 3600 RPM

Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)
CC/AC	Stick/TIG	50-100 A	225 A at 25 V, 100% Duty Cycle
CC/DC		70-150 A 85-225 A (210 DC)	210 A at 25 V, 100% Duty Cycle
CV/DC	MIG/FCAW	19-28 V	200 A at 20 V, 100% Duty Cycle

on Chart

Generator Power at 104°F (40°C)

1-Phase Peak: 10,500 watts
Continuous: 9500 watts

3-Phase (480 V) Peak: 11,000 watts
Continuous: 10,000 watts

| Dimensions | Net Weight | H: 28 in (711 mm) | 540 lb | (245 kg) | to top of exhaust | W: 20 in (508 mm) | D: 45½ in (1156 mm) |

Electronic			
Fuel Injection	Adving Adv	rantage Comp	arie
Fuel Injection	Ouvings Aut	raintage outlip	uiio
	Cauburatar Madala	EEI Madal	

	Carburetor Models	EFI Model
Fuel Use	_	12-27% less
Weekly Fuel Cost (25 gal/week; \$3.00 gas)	\$75	\$54.75 (a \$20 savings — \$20 x 50 weeks = \$1,000/yr!)
HC+NO ₂ emissions	_	33% lower
CO emissions	_	27% lower
Run time: 1/8 in 7018	17 hours	20 hours
Run time: welding at 140 A and 40% duty cycle	14.5 hours	17 hours
Run time: 2400 watts (120 V, 20 A) continuous load	12 hours	15.2 hours
Total output at 3600 RPM	23 HP	25 HP
Accu-Rated™ power (same for Bobcat and Trailblazer)	11,000 W peak power 9,500 W continuous	12,000 W peak power 10,500 W continuous

SAVE UP TO \$1,000 PER YEAR!

Here's how Bobcat™ and Trailblazer® welder/generators with optional EFI engines can save you money, help the planet and improve job site performance.





Scan this tag to hear from an EFI customer.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.

THE GREEN REVOLUTION STARTS BY OWNING BLUE

Now, thanks to breakthrough work with our engine suppliers, Miller is the exclusive provider of gas welder/generators with EFI technology.

EFI — Electronic Fuel Injection. It's standard technology on most cars. EFI optimizes the air/fuel ratio for all engine speeds and all engine loads. It's what enables V6 engines to deliver small block V8 performance while getting better mileage.

Compared to carburetor models, Bobcats and Trailblazers with EFI gas engines deliver a Win-Win performance:

- Up to 27% better fuel economy.
- Up to 27% longer run times for less refueling.
- Reduced emissions because EFI engines use less fuel.
- No choke required. EFI means easy starting in all climates, at all altitudes and no carburetor icing.

Check out the **Bobcat and Trailblazer EFI models** on pages 63 and 64.

ENGINE-DRIVEN











	Compact, lightweight, durable, and cost-effective machine is designed for contractors, maintenance/ repair, and farm and ranch applications.	Cost-effective, multiprocess machine primarily used for Stick is great for farm, ranch, stand-alone generator, and maintenance/repair	Rugged engine drive is great for Stick and Flux Cored welding and is designed for maintenance/ repair operations, construction, farm, ranch	Unbeatable Stick, Wire, and DC TIG arc performance, and the independent weld and generator system are ideal for construction, fabrication, and maintenance/	High output, unbeatable arc performance, and the independent weld and generator system make this perfect for construction, fabrication, and maintenance/
Weld Performance		opolations.	מומ שליים מומים	chair obciations.	operations:
Stick – DC	Very Good	Very Good	Very Good/Excellent	> Excellent	Excellent
Stick – AC (AC electrode)		Very Good/Excellent	Very Good/Excellent		> Very Good/Excellent
MIG – Wire (Solid/FCAW), Steel	See Accessories below	↓ Fair	0009 A	> Excellent	> Excellent (325 Amps)
MIG – Wire, Aluminum w/Spool Gun	-	├ Fair	October 1	> Excellent	> Excellent (325 Amps)
TIG - DC, Steel	Good	Good	Very Good	> Excellent	Excellent
TIG – AC, Aluminum w/H.F.*		→ Fair	> Fair/Good	1	Very Good
Generator					
Watts	6,500 Watts	11,000 Watts	> 11,000 Watts/ 12,000 with EFI	11,000 Watts/ 12,000 with EFI	11,000 Watts/ 12,000 with EFI
Power Quality	Good/Very Good	Very Good/Excellent	Very Good/Excellent	Very Good/Excellent	Very Good/Excellent
Power While Welding	Fair	Fair/Good	0000 A	> Excellent	Excellent
	With voltage control set near maximum	With voltage control set near maximum	Easier to fine tune arc with voltage control near maximum	Independent weld and generator — no interaction between tools and	Independent weld and generator—no interaction between tools and
Key Features				ille Weldiliy alıc	ille Weldilig al c
Fuel Capacity	7 gallon	12 gallon	12 gallon	12 gallon	12 gallon
Sound Levels at 23 ft (7 m)	82.3 dB	> 75.5 dB (1/3 less noise)	75.5 dB (1/3 less noise)	75.5 dB (1/3 less noise)	75.5 dB (1/3 less noise)
Digital Meters with SunVision™	No	No	No	✓ Yes	Yes
Stick: DIG/Adaptive Hot Start™	No	No	No	→ Yes	Yes
Maintenance Displays	Hours/Oil Change	Hours/Oil Change	Hours/Oil Change/Fuel	> Hours/Oil Change/Fuel/RPMs	Hours/Oil Change/Fuel/RPMs
Polarity Switch	No	Yes	Yes	No	Yes
14-pin Remote Receptacle	No	No	No	Ş Yes	Yes
Accessories					
Wire Feeders	_	SuitCase® VS**	SuitCase® VS**	SuitCase® VS and RC**	SuitCase® VS and RC**
Spool Guns	-	Spoolmate [™] 3035/SGA 100C	Spoolmatic® 30A/WC-115A	Spoolmatic® 30A/WC-24	Spoolmatic® 30A/WG-24 (325 Amps)
MIG (All-In-One), Plug-In	Millermatic® 180 and smaller	→ Millermatic® 212 and smaller	Millermatic® 212 and smaller	Millermatic® 212 and smaller	Millermatic® 212 and smaller
TIG (AC/DC), Plug-In	Dynasty® 200	Dynasty® 200	Dynasty® 200	Dynasty® 200	Dynasty® 200
Plasma Cutters (see chart on pg 70)	Spectrum® 375 X-TREME™	Spectrum® 875 at 50 A and smaller	Spectrum® 875 at 50 A and smaller	Spectrum® 875 at 50 A and smaller	Spectrum® 875 at 50 A and smaller
			*High Frequency Arc S	*High Frequency Arc Starter and Stabilizer **VS = Voltage Sensing Feeder, RC = Remote Control Feeder	sing Feeder, RC = Remote Control Feeder

Bobcat[™] 225

See Literature No. FD/4.4

Cost-effective, multiprocess machine primarily used for Stick welding is great for farm/ranch, stand-alone generator, and maintenance/repair operations.



Typical Equipment Power Usage

Bobcats and Trailblazers will easily start and run the following equipment:

start and run the following equipment:		
Farm Equipment	Starting Watts	Running Watts
Barn cleaner (5 HP)	11,600	3000
Silo unloader (5 HP)	12,200	4300
Portable conveyer (1/2 HP)	3400	1000
Milker (5 HP)	10,500	2800
Contractor Tools		
Hand drill (1/2 in)	600	600
Circular saw (8 ¹ / ₄ in)	1400	1400
Air compressor (11/2 HP)	8200	2200
Flood lights (vapor)	1250	1000
Household		
Refrigerator/freezer	2200	700
Sump pump	1300	800
Welding/Cutting Equipment		
Millermatic [®] 212 Auto-Set [™] MIG welder, 230 V	6500	6500
Spectrum [®] 625 X-TREME [™] 30 A, 230 V, ¹ / ₂ in cut	6900	6900

Toughest Welders...



Versatile AC and DC Stick/TIG plus Wire capabilities provide quality welds on all types of metals. DC is smooth and easy to run while AC Stick is used when arc blow occurs.

Note: AC TIG requires Dynasty 200 Series or HF-251 (non-critical).

Fully enclosed case provides reduced sound levels and fully protects the engine.

Maintenance displays show engine hours and hours left before an oil change is due.

Accu-Rated™ 11,000 watts of usable peak power cranks out enough power for most applications: job site, farm/ranch, or home. 9500 watts of continuous power.

Ten-degree skewed-rotor design for smoother generator power — better power, better performance.

Fuel capacity of 12 gallons means many hours of run time before refueling.

EXCLUSIVE! Super-tough protective armor with covers has high-impact resistance in all temperatures and is chemical-resistant. Other applications include: automotive bumpers, tractor hoods and panels, lawn mower decks, large structural parts, etc.

Output stud and receptacle covers are required by OSHA and CSA for job site safety.

Welding and power ratings are at 104°F (40°C) — highest in its class to ensure reliable performance.

Heavy-duty construction. All internal components are designed to handle the harshest environments and will run better and last longer.

Industrial



Processes

- AC/DC Stick (SMAW)
- MIG (GMAW)
- Flux Cored (FCAW)¹
- AC²/DC TIG (GTAW)

¹With voltage-sensing feeder only. ²With Dynasty[®] 200 Series or HF-251 (non-critical).

Gasoline Engines

Kohler CH 23 or Subaru EH 65

V-twin-cylinder, 4-cycle, overhead valve, industrial, air-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ Wire Feeders (pg 25)
- Dynasty[®] 200 Series (pg 42)
- Spectrum[®] Plasma Cutters 375 X-TREME™ #907 339 (pg 76) 625 X-TREME™ #907 404 (pg 76)
- Adapter Cord, Full KVA #300 517 (pg 90)
- 1-Phase Full KVA Plug Kit #119 172 (pg 90)
- Remote Oil Drain/Filter Kits (pg 90)
- All-Purpose Running Gear (pg 90) #300 396 with Inner Tubes #300 477 with Never Flat™ tires



- Protective Cover #195 333 (pg 90) (for use without Running Gear or Protective Cage)
- Protective Cover #195 529 (pg 90) (for use with Running Gear)



- Protective Cage with Cable Holders #195 331 (pg 90)
- HWY-1000 Trailer #195 013 (pg 91)
- Engine Tune-up Kits are available from your Miller parts distributor.

See your Miller distributor for other popular Miller options and accessories.

Note: See gas engine drive comparison chart on page 61.
*More models available — see our Web site or Literature No. ED/4.4.

	Stock Number*
	(#907 209) Kohler
	23 HP at 3600 RPM
É	(#907 210) Subaru
	23 HP at 3600 RPM

Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	
CC/AC	Stick/TIG	50-100 A 70-150 A	225 A at 25 V, 100% Duty Cycle	
CC/DC		85-225 A (210 DC)	210 A at 25 V, 100% Duty Cycle	
CV/DC	MIG/FCAW	19-28 V	200 A at 20 V, 100% Duty Cycle	

Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
Peak: 11,000 watts Continuous: 9500 watts	H: 28 in (711 mm) H: 33 in (838 mm) to top of exhaust W: 20 in (508 mm) D: 451/2 in (1156 mm)	530 lb (240 kg)

ENGINE-DRIVEN



Bobcat 250 (Gas, LP or Diesel) see Literature No. ED/4.4

Rugged engine drive is great for Stick and Flux Cored welding and is designed for maintenance/repair operations, construction, farm/ranch, and generator use.



Accu-Rated™ Not Inflated Generator Power

Miller's Accu-Rated™ 11,000 watts (12,000 with EFI) of usable peak power is delivered for a minimum of 30 seconds. Accu-Rated means peak power is usable for maximum generator loads such as plasma cutting, Millermatic® MIG welders and motor starting. Accu-Rated peak power beats the competition's very short-duration peak or surge power. Use your peak power, it's more than a number.

Smooth Power -**Not Spike Power**

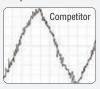
Revolutionary ten-degree skewed-



rotor design optimizes generator performance for smoother power—not spiked power found with other brands. Better power—better performance.



Waveform Comparison



Note: See gas engine drive comparison chart on page 61 and diesel engine drive comparison chart on page 66. *More models available — see our Web site or Literature No. ED/4.4.

- **AC welding output is not available with Battery Charger option.
- ***Liquid Withdrawal LP System.

Toughest Welders...



Ontional EFI

Electronic Fuel Injection (EFI) **Benefits vs Carburetor Models**

- 12% to 27% better fuel economy!
- Reduced emissions 33% lower HC+Nox levels and 27% lower CO! (EPA 1000 Hour Certification)
- · Easy starting in all climates with no choke required
- Elimination of carburetor icing
- Better high-altitude performance (electric fuel pump is recommended)
- 12,000 watts of generator power and more weld output

Versatile AC and DC Stick/TIG plus Wire capabilities

provide quality welds on all types of metals. DC is smooth and easy to run while AC Stick is used when arc blow occurs. Note: AC TIG requires Dynasty 200 Series or HF-251 (non-critical).

Tri-Cor™ technology is a redesigned stabilizer with added iron core for smoother weld output, improved performance and decreased spatter with 7018 electrodes. All without sacrificing the excellent performance with 6010 electrodes.

Fuel capacity of 12 gallons means many hours of run time before refueling.

EXCLUSIVE! Super-tough protective armor w/covers

has high-impact resistance in all temperatures and is chemical-resistant. Other applications include: automotive bumpers, tractor hoods and panels, lawn mower decks, large structural parts, etc.

Welding and power ratings are at 104°F (40°C) highest in its class to ensure reliable performance.

Meter maintenance displays

- Fuel gauge
- Hour meter function
- · Oil change interval
- Diesel: High coolant temperature and low oil pressure
- Diesel: Low fuel shutdown engine shuts down before system runs out of fuel making restarts easy

Industrial • Heavy Industrial

Processes

- AC/DC Stick (SMAW)
- MIG (GMAW)
- Flux Cored (FCAW)¹
- AC²/DC TIG (GTAW)
- · Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons - rated 3/16 in and capable 1/4 in)
- · Optional Battery Charger (replaces AC weld output)
- ¹With voltage-sensing feeder only. ²With Dynasty® 200 Series or HF-251 (non-critical).

Gasoline/LP Engines

Gas: Kohler CH 23 or Subaru EH 65 EFI Gas: Kohler ECH 730 LP: Kohler CH 25

V-twin-cylinder, 4-cycle, overhead valve, industrial, air-cooled

Diesel Engine

EPA Tier 4 Compliant! Kubota D722

3-cylinder, industrial, liquid-cooled Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ Wire Feeders (pq 25)
- Dynasty[®] 200 Series (pg 42)
- Spectrum® Plasma Cutters 375 X-TREME™ #907 339 (pg 76) 625 X-TREME™ #907 404 (pg 76)
- Adapter Cord, Full KVA #300 517 (pg 90)
- 1-Phase Full KVA Plug Kit #119 172 (pg 90)
- Remote Oil Drain/Filter Kits (pg 90)
- LP Tank Mounting Assembly with Hose #195 329 (pg 90)
- All-Purpose Running Gear for Gas/LP models (pg 90) #300 396 with Inner Tubes #300 477 with Never Flat™ tires
- Protective Covers (pg 90)
- Protective Cage with Cable Holders (pg 90) #195 331 for Gas/LP models #300 052 for Diesel models
- HWY-1000 Trailer #195 013 (pg 91)
- Engine Tune Up Kits are available from your Miller parts distributor.

Stock Number*	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
(#907 211) Kohler, 23 HP at 3600 RPM (#907 212) Subaru, 23 HP at 3600 RPM (#907 211-02-1)** Kohler, 23 HP at 3600 RPM w/12/24/36 V Battery Charger (#907 450) Kohler EFI, 25 HP at 3600 RPM	CC/AC CC/DC	Stick/TIG	40-100 A 60-140 A 80-200 A 100-275 A	250 A at 25 V, 100% Duty Cycle 275 A at 25 V, 60% Duty Cycle EFI Model 250 A at 28 V, 100% Duty Cycle 275 A at 25 V, 100% Duty Cycle	Peak: 11,000 watts Continuous: 9500 watts EFI Model Peak: 12,000 watts Continuous: 10,500 watts	Gas/LP Models H: 28 in (711 mm) H: 33 in (838 mm) to top of exhaust W: 20 in (508 mm) D: 45½ in (1156 mm)	Gas/LP Models 556 lb (252 kg) Diesel
(#907 211-03-1/#195 329)*** Kohler LP 25 HP at 3600 RPM with GFCI and LP Tank Mounting Assembly with Hose	CV/DC	MIG/FCAW	17-22 V 20-28 V	250 A at 28 V, 100% Duty Cycle 275 A at 25 V, 60% Duty Cycle		Diesel Model H: 30 in (762 mm) H: 34¼ in (870 mm) to top of exhaust W: 20 in (508 mm)	Model 700 lb (318 kg)
(#907 213) Kubota 19 HP at 3600 RPM						D: 52 in (1321 mm)	

Trailblazer® 302 & 275 DC (Gas, LP or Diesel) See Literature No. ED/4.77

High output, unbeatable arc performance, and the independent weld and generator system make these engine drives perfect for construction, fabrication, and maintenance/repair operations.



See pages 46 and 47 for wireless remote controls.

Trailblazer 302 gas model shown.



Independent weld and generator. Trailblazer Series has the only truly independent weld and generator system—meaning no interaction between tools and the welding arc, and it has the strongest generator power while welding.

Superior arc performance

- Four preset DIG settings (Stick)
- Adaptive Hot Start[™] (Stick)
- Excellent MIG/FCAW arc performance
- Lift-Arc[™] TIG with Auto-Crater[™] and Auto-Stop[™]

Note: See gas engine drive comparison chart on page 61 and diesel engine drive comparison chart on page 66.

*More models available — see our Web site or Literature No. ED/4.77. **Liquid Withdrawal LP System.

Toughest Welders...



Optional EFI

Electronic Fuel Injection (EFI) Benefits vs Carburetor Models

- 12% to 27% better fuel economy!
- Reduced emissions 33% lower HC+Nox levels and 27% lower CO! (EPA 1000 Hour Certification)
- Easy starting in all climates with no choke required
- Elimination of carburetor icing
- Better high-altitude performance (electric fuel pump is recommended)
- 12,000 watts of generator power

EXCLUSIVE! DC TIG arc end with Auto-Crater™

- · Eliminates need for a remote control
- · Maintains shielding gas coverage
- Eliminates tungsten and workpiece contamination
- · Eliminates unwanted arc strikes outside the weld area

Accu-Rated™ 11,000 watts (12,000 with EFI) of usable peak power cranks out enough power for most applications: job site, farm/ranch, or home. 9,500 watts of continuous power (10,500 with EFI).

Self-calibrating digital weld meters with maintenance displays

- Preset and actual weld amperage/voltage
- Fuel gauge
- · Hour meter function and oil change interval
- Engine RPMs
- Diesel: High coolant temperature, low oil pressure and low fuel shutdown — engine shuts down before system runs out of fuel making restarts easy

EXCLUSIVE! Super-tough protective armor with

covers has high-impact resistance in all temperatures and is chemical-resistant. Other applications include: automotive bumpers, tractor hoods and panels, lawn mower decks, large structural parts, etc.

Heavy Industrial

CV AC DC

Processes

- AC¹/DC Stick (SMAW)
- MIG (GMAW)²
- Flux Cored (FCAW)²
- AC³/DC⁴ TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16 in carbons, capable 1/4 in carbons)
- 1302 model only.
- ²With wire feeder.
- ³Both models with Dynasty 200[®] Series or 302 model with HF-251.
- ⁴Two-piece TIG torch recommended.

Gasoline/LP Engines

Gas: Kohler CH 23 or Subaru EH 65 EFI Gas: Kohler ECH 730 LP: Kohler CH 25

V-twin-cylinder, 4-cycle, overhead valve, industrial, air-cooled

Diesel Engine

EPA Tier 4 Compliant! Kubota D722

3-cylinder, industrial, liquid-cooled Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ 12VS Wire Feeder #951 184 (pg 25)
- Spoolmatic[®] 30A Aluminum Spool Gun/WC-24 Control #130 831/#137 549 (pg 28)
- Dynasty® 200 Series (pg 42)
- Spectrum® Plasma Cutters 625 X-TREME™ #907 404 (pg 76) 875 #907 390-01-1 (pg 77)
- Adapter Cord, Full KVA #300 517 (pg 90)
- 1-Phase Full KVA Plug Kit #119 172 (pg 90)
- Remote Oil Drain/Filter Kits (pg 90)
- LP Tank Mounting Assembly with Hose #195 329 (pg 90)
- All-Purpose Running Gear for Gas/LP models (pg 90) #300 396 with Inner Tubes #300 477 with Never Flat™ tires
- Protective Covers (pg 90)
- Protective Cage with Cable Holders (pg 90)
- HWY-1000 Trailer #195 013 (pg 91)
- HF-251D-1 #042 388 (pg 95)
- Engine Tune Up Kits are available from your Miller parts distributor.

	Model	Stock Number*	Welding Mode	Process	Amp/Volt Ranges	Rated Weld Output at 25 V at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
<u>.</u>	Trailblazer 275 DC	(#907 214) Kohler, 23 HP at 3600 RPM (#907 215) Subaru, 23 HP at 3600 RPM (#907 451) Kohler EFI, 25 HP at 3600 RPM	CC/DC	Stick/TIG	10-275 A	275 A at 100% Duty Cycle	Peak: 11,000 watts Continuous:	H: 28 in (711 mm) H: 33 in (838 mm) to top of exhaust W: 20 in (508 mm) D: 45½ in (1156 mm) Diesel Model Hoo	Gas/LP Models 568 lb
Gasoline/LP		(#907 214-02-2/#195 329)** Kohler LP 25 HP at 3600 RPM with GFCI and LP Tank Mounting Assembly with Hose	CV/DC	MIG/FCAW	13-33 V, 10-275 A	275 A at 100% Duty Cycle	9500 watts EFI Model Peak: 12,000 watts Continuous: 10,500 watts		(258 kg) Diesel Model
	Trailblazer 302		CC/AC	TIG/Stick	10-225 A	200 A at 60% Duty Cycle			(327 kg)
			CC/DC	Stick/TIG	10-300 A	280 A at 100% Duty Cycle			
Diesel	Trailblazer 302	(#907 218) Kubota 19 HP at 3600 RPM	CV/DC	MIG/FCAW	13-35 V, 10-325 A	300 A at 100% Duty Cycle			

ENGINE-DRIVEN



Trailblazer® 302 Air Pak™

See Literature No. ED/4.78

Powerful all-in-one tool is designed for repair and construction with unbeatable multiprocess weld quality, integrated rotary screw air compressor, 13,000 watts of generator power for job site tools, and battery charge/jump start.



Includes Battery Charge/Jump Start!

Battery charge/jump start

- For 12 and 24 volt batteries
- Adjustable 10 to 75 amps of charge current
- Up to 450 amps of jump start amperage

Optional air cooler with separator.

Removes moisture, fully integrated. For tools, blasters, plasma cutting, and gouging. Effective when temperatures are above freezing and easily bypassed when below freezing.



Size and weight advantage. By adding just 14 inches of length to a Trailblazer, the Air Pak occupies up to 50% less truck bed space and up to 25% less axle weight compared to using a separate engine-driven air compressor.

Cutting and gouging advantage. Ample generator power for plasma cutters and weld power for Carbon Arc gouging, plus integrated air compressor delivers air for both.

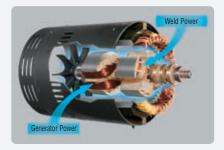
EXCLUSIVE! Capable of running air tools at idle. Reduce noise and fuel consumption by running impacts, decking punches, and many other types of air tools at idle speed.

Industry-leading 13,000 watts of peak power is voltage regulated and independent of weld settings. 11,000 watts of continuous power.



Rotary screw air compressor

- · Runs many tools at idle speed
- Delivers up to 26 CFM and 160 PSI of air with no storage tank
- · Gives 100% deliverable air
- Compressor is warranted by Miller for 3 years
- Air outputs rated at an industry high 104°F (40°C)
- Front panel air pressure adjustment (80–160 PSI)
- Screw compressor is designed for more than 30,000 hours of operation
- Automatic overpressure shutdown with indication



Independent weld and generator.

Trailblazer Series has the only truly independent weld and generator system—meaning no interaction between tools and the welding arc, and it has the strongest generator power while welding.

Heavy Industrial

____/

Processes

- AC/DC Stick (SMAW)
- MIG (GMAW)
- Flux Cored (FCAW)¹
- AC²/DC³ TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16 in carbons, capable 1/4 in carbons using integrated air compressor)
- Battery Charger/Jump Start With wire feeder.
- ¹With wire teeder. ²With Dynasty 200® Series or
- HF-251 (non-critical).
 ³Two-piece TIG torch recommended.

Gasoline Engine Kohler CH 750

V-twin-cylinder, 4-cycle, overhead valve, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ 12VS Wire Feeder #951 184 (pg 25)
- Spoolmatic[®] 30A Aluminum Spool Gun/WC-24 Control #130 831/#137 549 (pg 28)
- Dynasty[®] 200 Series (pg 42)
- Spectrum[®] Plasma Cutters 625 X-TREME™ #907 404 (pg 76) 875 #907 390-01-1 (pg 77)
- Adapter Cord, Full KVA #300 517 (pg 90)
- Remote Oil Drain/Filter Kits (pg 90)
- Protective Cover #300 379 (pg 90)Air Cooler with Separator #300 420
- Air Gooler with Separator #300 42
 50 ft Air Hose with 1/2 in NPT
- Swivel Fitting #300 571



• 25 ft Battery Charge/Jump Cables with Plug #300 422



- Protective Cage with Cable Holders #300 473 (pg 90)
- Engine Tune Up Kits are available from your Miller parts distributor.

See your Miller distributor for other popular Miller options and accessories.

*More models available — see our Web site or Literature No. ED/4.78. **Battery charge/jump cables (#300 422) must be ordered separately.

	Stock Number*	Mode	Process	Ranges	at 32 V at 104°F (40°C)	Power at 104°F (40°C)	Dimensions	Weight
with (#90	(#907 447**) Kohler, 30 HP at 3600 RPM	CC/DC	Stick/TIG	10-300 A	280 A at 100% Duty Cycle	Peak: 13,000 watts Continuous: 11,000 watts H: 28 in (711 mm) H: 34½ in (876 mm) to top of exhaust W: 20 in (508 mm) D: 59% in (1514 mm)		771 lb
	with Battery Charger/Jump Start (#907 447-00-4**) Kohler, 30 HP at 3600 RPM with Battery Charger/Jump Start and Cooler/Separator	CV/DC	MIG/FCAW	13-35 V, 350 A	300 A at 100% Duty Cycle 350 A at 60% Duty Cycle		(350 kg)	
Gaso	with battery charger/ournp start and cooler/separator	CC/AC	TIG/Stick	10-225 A	225 A at 60% Duty Cycle		D. 3578 III (1314 IIIIII)	

Amn/Volt | Rated Wold Output

			,	,				
Air Compressor	Features		Free Air Delivery at 3600 RPM	Free Air Delivery at 3000 RPM	Free Air Delivery at 2400 RPM (Idle)	Working Pressure Constant	Duty Cycle	Oil Capacity
By Miller	Rotary screw with electric clutch for on/off. C Life expectancy 30,000 hours.	Oil change intervals 500 hours.	26 cfm (0.73 m³/min)	21 cfm (0.59 m³/min)	17 cfm (0.48 m³/min)	80-160 psig	100%	1.75 qt (1.7 L)



Big Blue® 300 Pro (pg 67)

<u>(6</u>	
Bobcat" 250 Diesel (pg 63)	1) E- 11
0 Dies	
t" 25	ant 4
Bobca	EPA Tier 4 Compliant



Low speedQuietUnbeatable	Low speed ar
• Low speed • Quiet • Unbeatable arc performance	Low speed and quiet with

LightweightUnbeatable arc performance

 Lowest price point CompactLightest weight

Unbeatable arc performance

Compact, lightweight, unbeatable Low speed and quiet with are performance and independent
perfect for construction (pipe and structural), maintenance/repair operations, and fabrication.

Very Good	Excellent	Excellent	Excellent
Good	Excellent	Excellent	Excellent
Very Good	Excellent	Excellent	Excellent
Fair	Very Good	Not Available	Not Available
3/16 in, 1/4 in	3/16 in, 1/4 in	3/16 in, 1/4 in	5/16 in
40-275 A, 17-28 V	10-325 A, 13-35 V	20-410 A, 14-40 V	20-500 A, 14-40 V
11,000 Watts	11,000 Watts	12,000 Watts	5500 Watts
	1	1	
80.5 dB	80.5 dB	72.2 dB (almost 1/2 less noise)	71.5 dB at 1850 RPM/81.5 dB at 3000 RPM
700 lb	720 lb	1095-1100 lb	1095 lb
30 x 20 x 52 in	30 x 20 x 52 in	32 x 26-1/4 x 56 in	32 x 26-1/4 x 56 in
2400/3600 RPM	2400/3600 RPM	1500/1850 RPM	1500/1850/3000 RPM
Not Available	Digital with Preset and Weld Displays	Digital with Preset and Weld Displays	Optional Digital w/Preset and Weld Displays

MIG - Wire, Aluminum with Spool Gun MIG - Wire (Solid/FCAW), Steel

Carbon Arc Gouging (Rated, Capable of)

Amperage/Voltage Range

TIG – AC, Aluminum w/H.F.*

TIG-DC, Steel

Standard Generator Power

Optional Generator Power

Sound Level (Fully Loaded)

Weight

Height is without exhaust stack

Engine Speed (Idle/High)

Weld Meters

Size (H x W x D in Inches)

Big Blue® 400 Eco Pro (pg 69)	EPA Tier 41 Compliant
	Harrison

EPA Tier 4i Compliant

EPA Tier Ail Compliant	• Big power in a small package
EPA Tier 4!	• Low speed
EPA Tier 4 Compliant	• Compact

Trailblazer® 302 Diesel (pg 64)	
Bobcat [™] 250 Diesel (pg 63)	
	e the Diesel 9 Drive
66	Choos Right Engin

Note: See the following pages for other diesel machines that may fit your applications. "High Frequency Arc Starter and Stabilizer

Big Blue® 300 Pro

See Literature No. ED/5.21

Reliable low-speed diesel with outstanding arc performance. Ideal for construction, fabrication or process piping professionals.

wireless remote controls.



Meter maintenance displays

- Fuel gauge
- · Hour meter function
- Oil change interval
- · High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown engine shuts down before system runs out of fuel making restarts easy

The Vault — ultimate control board reliability. Housed in a sealed vault, sealed connections are made through watertight plugs that make these components impenetrable to dust and moisture.



Tailored arc control (DIG) allows arc characteristics to be changed for specific applications and electrodes. Smooth running 7018 or stiffer, more penetrating 6010.

Improved arc starts and arc stability for excellent performance in all applications.

Easy to use. Simple controls make it easy to set-up and weld.

Quiet. Only 72.2 dba (97 Lwa) at maximum output. Improves work site communication and safety.

Compact design fits sideways in a standard pickup.

Optional stainless steel package available.

CSA, IEC and NEMA compliant.

Heavy Industrial

- **Processes** Stick (SMAW) • MIG (GMAW)
- Flux Cored (FCAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16 in carbons, capable 1/4 in carbons)

Diesel Engines

EPA Tier 4i Compliant Choices! Caterpillar C1.5

3-cylinder, industrial, liquid-cooled Mitsubishi S4L2

4-cylinder, industrial, liquid-cooled Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase[®] X-TREME[™] 12VS (pg 25)
- SuitCase® 12RC (pg 26)
- Dynasty® 200 Series (pg 42)
- Wireless Remote Hand Control #300 430 (pg 47)
- Spectrum® 875 (pg 77)
- Adapter Cord, Full KVA #300 517 (pg 90)
- 1-Phase Full KVA Plug Kit #119 172 (pg 90)
- Protective Cover #195 301 (pg 90) • HWY-224 Trailer #043 805 (pg 91)
- PRHC-14 Remote #195 511 (pg 94)

See your Miller distributor for other popular Miller options and accessories.

Note: See diesel engine drive comparison chart on page 66. *More models are available see our Web site or Literature No. ED/5.21.

(#907 144) CAT, 21.7 HP at 1850 RPM

Professional Quality Arc!

Stock Number*

(#907 144-02-1) CAT w/Stainless Steel/120 V Block Heater (#907 472) Mitsubishi, 24.4 HP at 1850 RPM (#907 472-001) Mitsubishi w/120 V Block Heater

Welding Mode	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
CC/DC	20-410 A	300 A at 32 V, 60% Duty Cycle	Peak: 12,000 watts Continuous: 10,000 watts	H: 32 in (813 mm) W: 26¼ in (667 mm) D: 56 in (1422 mm)	Caterpillar 1100 lb (499 kg)
CV/DC	14-40 V				Mitsubishi 1083 lb (491 kg)

You

WELDING KNOWLEDGE AT YOUR FINGERTIPS

MillerWelds.com Makes Welding Easy!

Improve your welding skills — with how-to articles, suggested weld calculator settings and tech tips on MIG, TIG. Stick and Plasma.

Check out our Video Library where you can see welding and cutting demos, troubleshooting guides and product set up videos!

Learn more at MillerWelds.com/ImprovingYourSkills



MEW! Big Blue® 350 PipePro® System

Designed exclusively for transmission pipeline work, the system offers a complete welding solution. With Stick welding capabilities — as well as MIG/FCAW welding capabilities to meet high-strength steel requirements — it is ideal for the most demanding pipeline jobs.



complete information and product spec sheets.

XBERNARD° PipePro Dura-Flux™

- Features a lightweight, rotatable Hi-Viz™ neck that matches the SuitCase X-TREME HD DS performance, resulting in optimal arc characteristics.
- Power cable with internal trigger leads provides better weld-joint access.
- Replaceable liner makes maintenance simple.
- Comfortable handle with dual schedule switch optimizes wire feed speed and reduces user fatigue.

HOBART BROTHERS Fabshield® 79T8/79T8Ni2

- Self-shielded flux-cored tubular wires specifically designed for transmission pipeline applications.
- Fast-freezing, easy-to-remove slag decreases time spent clearing weld beads.
- All-position welding, excellent vertical-down performance, reduces fatigue and weld cycle time.
- Four 10-lb vacuum-packed spools per jobsite-friendly bucket, 1080 lb per pallet.
- · Ideal for multipass welding on deep-groove pipe weld butt joints.
- 79T8 typical applications are on X70 grade pipe and below.
- 79T8Ni2 typical applications are on X80 grade pipe.

Miller Bia Blue 350 PipePro

- Easy arc starts and better arc control provide improved arc performance to produce more consistent welds.
- Enhanced MIG/FCAW arc control for best in class performance.
- Quieter 40% less noise improves work site communication and safety.
- The Vault ultimate control board reliability. A sealed aluminum case protects the circuit board from dust, dirt, moisture and heat.
- 12,000 watts of peak single-phase auxiliary power runs multiple jobsite tools.
- Compact size and weight optimizes truck space.
- 20% greater fuel efficiency.
- Tier 4i Compliant meets tough EPA emission requirements.
- Auto Remote Sense[™] (ARS) eliminates confusion of a remote/panel switch.
- LINE-X® cover is tough to provide superior impact, corrosion and abrasion protection.
- Optional stainless steel package available.
- CSA, IEC and NEMA compliant.

Miller SuitCase® X-TREME™ 8HD DS

- · Voltage-sensing, heavy-duty wire feeder features numerous performance-driven benefits.
- High-torque motor can handle large or small diameter flux-cored wires with ease.
- Improved motor control allows for incredible precision and arc control.
- Dual schedule operation when connected to PipePro Dura-Flux gun, fixed 12% reduction in wire feed in Schedule B.

Miller Wireless Remote Hand Control (see pg 47)

- Completely cordless design increases project productivity, saves money and improves operator safety.
- · Extends remote welding control range to 300 ft for jobsite mobility.
- Eliminates costly cord failures.
- Improves weld quality with precise operator
- Belt clip keeps the remote secure and accessible.

Heavy Industrial

co DC

Processes

- Stick (SMAW)
- MIG (GMAW)
- Flux Cored (FCAW)
- TIG (GTAW)
- · Air Carbon Arc Cutting and Gouging (CAC-A) (rated 1/4 in carbons)

Diesel Engine

EPA Tier 4i Compliant! Mitsubishi S4L2

4-cylinder, industrial, liquid-cooled Note: Engine is warranted separately by engine manufacturer.

Big Blue 350 PipePro System **Consists Of**

- Big Blue® 350 PipePro® engine drive #907 428 or #907 428-001
- SuitCase® X-TREME™ 8HD DS wire feeder #300 594-003
- · Wireless Remote Hand Control and 14-pin receiver #300 430
- Bernard® PipePro® Dura-Flux™ gun with 15 ft (4.5 m) cable with 1/16 in liner #7010072 with 5/64 in liner #7010082
- · Hobart Brothers Fabshield® 1/16 in 79T8 #S228519-V01 1/16 in 79T8Ni2 #S228825-V01 5/64 in 79T8 #S228525-P01 5/64 in 79T8Ni2 #S228819-V01

Most Popular Accessories Big Blue 350 PipePro

- 1-Phase Full KVA Plug Kit #119 172 (pg 90)
- Engine Filter Kit #244 711 (includes air, oil and fuel filters)

SuitCase X-TREME 8HD DS Feeder

• V-Knurled Drive Rolls #079 609 1/16 in (1.6 mm) 5/64 in (2.0 mm) #079 610

PipePro Dura-Flux Gun

- Quik Tip™ Contact Tips 1/16 in (1.6 mm) #T1116 5/64 in (2.0 mm) #T1564
- Hi-Viz™ Quik Tip™ Insulator #7010062
- Neck (70° x R2 in) #7010068 Neck Liner
- 1/16 in #QJL-116 #QJL-564 5/64 in Cable Liner

1/16 in #44215 #44315 5/64 in

See your Miller distributor for other popular Miller options and accessories.

	ī	ī
	H	7
		t
	Ε	=
ı		=

Model/Stock Number* Big Blue 300 PipePro Engine Drive only (#907 428) Mitsubishi, 24.4 HP at 1850 RPM (#907 428-001) Mitsubishi w/Stainless Steel

Welding

Process Rated Output at 104°F (40°C) Mode Ranges CC/DC TIG 20-400 A 400 A at 26 V, 40% Duty Cycle Stick 20-400 A CV/DC MIG 14-40 V

Amp/Volt

350 A at 34 V 60% Duty Cycle 325 A at 33 V, 100% Duty Cycle 350 A at 31.5 V, 100% Duty Cycle

Continuous: 10,000 watts 350 A at 24 V, 100% Duty Cycle

Single-Phase Generator

Power at 104°F (40°C)

Peak: 12,000 watts

H: 32 in (813 mm) W: 261/4 in (667 mm) D: 56 in (1422 mm)

Dimensions

Net Weight 1018 lb (462 kg)

Model/Stock Number SuitCase X-TREME 8HD DS Feeder only (#300 594-003)

Input Power Operates on open-circuit voltage and arc voltage: 14-48 VDC/110 Max. OCV Input Welding Circuit Rating 330 A at 60% Duty Cycle

Wire Feed Speed Low Range 25-200 IPM (0.65-5.2 m/min)High Range 175-780 IPM (4.5-19.8 m/min) dependent on arc voltage

Diameter Capacity Solid Wire .023-.062 in (0.6-1.6 mm) Flux Cored .030 - .078 in (0.8-2.0 mm)

Wire Type and

Size Capacity 8 in (203 mm). 14 lb (6.4 kg)

Maximum Spool

Dimensions H: 123/4 in (324 mm) W: 71/4 in (184 mm) D: 18 in (457 mm)

Weight 30 lb (14 kg)





Rugged, compact, fuel-efficient diesel welder/generator that is Eco-friendly and Eco-nomical.



See pages 46 and 47 for wireless remote controls.

Performance in a Compact Package!

An Eco-nomical and Eco-friendly workhorse. the Big Blue 400 Eco Pro:

- Saves fuel designed to be up to 25% more efficient than competitive models.
- Produces fewer emissions meets tough EPA Tier 4i compliance standards.
- Runs guieter in economy mode, 71.5 dBa at 23 ft (7 m) is quieter than most competitive models.
- Easier to transport up to 44% smaller and 41% lighter than other models.
- · Compact design fits sideways in a standard pickup.
- · Offers exceptional arc control whether using Stick, TIG, MIG or Flux Cored process.

Dual-speed technology

- High engine power is available when needed for high amp applications up to 500 amps.
- Low-speed operation (1850 RPM) provides power for all welding applications up to 350 amps, keeping the engine guiet and more fuel efficient. Provides optimal performance in a small package.

Ultimate reliability

- Proven solid-state control technology is fully enclosed, protected and sealed by the Vault.
- The Vault's sealed connections make these components impenetrable to dust and moisture.

Heavy Industrial

Processes

- Stick (SMAW)
- TIG (GTAW)
- MIG (GMAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (5/16 in carbons)

Diesel Engine

EPA Tier 4i Compliant! Mitsubishi S4L2

4-cylinder, industrial, liquid-cooled Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ 8VS/12VS (pg 25)
- Wireless Remote Hand Control #300 430 (pg 47)
- Spectrum® 375 X-TREME™/ 625 X-TREME™ (pg 76)
- Protective Cover #195 301 (pg 90)
- HWY-224 Trailer #043 805 (pg 91)
- PRHC-14 Remote #195 511 (pg 94)

See your Miller distributor for other popular Miller options and accessories.

Note: See diesel engine drive comparison chart on page 66.

> Stock Number (#907 426) Mitsubishi, 35 HP at 3000 RPM (#907 426-001) with Weld Meters and 120 V Block Heater

Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	8
CC/DC	Stick/TIG	20-450 A	300 A at 32 V, 100% Duty Cycle 450 A at 30 V, 40% Duty Cycle	F (
	CAC-A	40-500 A	400 A at 36 V, 100% Duty Cycle 500 A at 30 V, 40% Duty Cycle	
CV/DC	MIG/FCAW	14-40 V	300 A at 28 V, 100% Duty Cycle 450 A at 30 V, 40% Duty Cycle	

Single-Phase Generator Power at 104°F (40°C) Dimensions **Net Weight** Peak: 5500 watts H: 32 in 1095 lb (497 kg) Continuous: 4000 watts (813 mm) W: 261/4 in (667 mm) D: 56 in (1422 mm)

Miller Du-Op® See Literature No. ED/10.9

Designed for fleet owners and construction contractors who want one low-speed diesel engine to provide two independent high-quality multiprocess arcs.



Save fuel, reduce maintenance costs, increase productivity.

Automatic engine shutdown protects engine if low oil pressure or high coolant temperature occurs.

Multiprocess capabilities performed independently at the same time. Each operator has a choice of Stick, TIG or MIG.

Paralleling switch parallels both outputs to a single side for double the amperage. This provides a safe and easy way to run large electrodes, Stud weld or Air Carbon Arc gouge.

Hot Start[™] automatically provides additional amperage making it easy to start all types of Stick electrodes.

Heavy Industrial



Processes

- Stick (SMAW)
- TIG (GTAW)
- MIG (GMAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/8 in carbons)

Diesel Engine

EPA Tier 4i Compliant! Deutz D 914 L03i

3-cylinder, industrial, air-cooled Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® Wire Feeders (pg 25/26)
- Wireless Remote Hand Control #300 430 (pg 47)
- HWY-224 Trailer #043 805 (pg 91)
- RHC-14 Remote Hand Control #242 211 020 (pg 95)

Stock Number
(#907 317) Deutz
48 HP at 1800 RPM

Stock Number	
#907 317) Deutz	
18 HP at 1800 RPM	

Process	Amp/Volt Ranges
DC Stick/TIG/	1 Welder: 15-60
MIG/FCAW	2 Welders: 15-30

mp/voit Kanges
Welder: 15-600 A, 10-32 V Welders: 15-300 A, 10-32 V

Rated Output at 40% Duty Cycle at 104°F (40°C)
1 Welder: 550 A at 30 V (16.5 kW) 2 Welders: 275 A at 31 V (8.5 kW)

Single-Phase Generator Power at 104°F (40°C)
Peak: 5500 watts
Continuous: 4000 watts

Dimensions	Net Weight
H: 475/8 in (1210 mm)	2005 lb
W: 31¼ in (794 mm)	(909 kg)
D: 60½ in (1537 mm)	



Big 40° CC or CC/CV See Literature No. ED/8.5



Superior CAT power with added features for the owner/operator compared to the Big Blue 400.



Big 40 CC/CV Deluxe model shown.

Deluxe Model has AC/DC polarity switch.

Quiet. Only 65 db (90 Lwa) at idle and 73.2 db (98 Lwa) at maximum output.

Automatic idle and engine gauges standard on all models.

Meter maintenance displays

- Fuel gauge
- Hour meter function
- · Oil change interval
- High coolant temperature, low oil pressure shutdowns
- Low fuel shutdown engine shuts down before system runs out of fuel making restarts easy

Designed and built with reliable, heavy-duty industrial components to allow it to operate in remote locations without downtime.

Hot Start™ makes it easy to start all types of Stick electrodes.

Arc-Drive™ enhances Stick welding, especially on pipe, by focusing arc and preventing electrode from going out.

5500-watt peak AC power independent of weld settings means no interaction between tools and the welding arc.

CSA, IEC and NEMA compliant.

Heavy Industrial • CC For DC *

Processes

- AC¹/DC Stick (SMAW)
- AC²/DC TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons—rated 5/16 in and capable 3/8 in)
- Stud
- MIG (GMAW)3
- Flux Cored (FCAW)³

¹Deluxe model only.

²Deluxe model with HF-251, or all models with Dynasty® 200 Series. ³CC/CV models only.

Diesel Engine

EPA Tier 4i Compliant! Caterpillar C2.2

4-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

See distributor for Miller accessories.

	Model	Stock Number	Process	Amp/Volt Ranges	Rated Output at 100% Duty Cycle at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
-	Big 40 CC	(#907 171) CAT, 32.6 HP at 1850 RPM	DC Stick/TIG	55-500 A	400 A at 36 V (14.4 kW)	Peak: 5500 watts, Continuous: 4000 watts	H: 43 in (1092 mm)	1545 lb
Dies	Big 40 CC/CV Deluxe Model	(#907 170-03-1) w/15,000 watts, Weld Meters and AC/DC Polarity Switch CAT, 33 HP at 1800 RPM	AC/DC Stick/TIG/ MIG/FCAW	15-350 A (AC) 15-500 A (DC) 14-40 V (DC)	AC: 300 A at 32 V (9.6 kW) DC: 400 A at 36 V (14.4 kW)	Additional Generator Power for Deluxe Model (While NOT Welding) 3-Phase: 15,000 watts or 1-Phase: 12,000 watts	W: 28½ in (724 mm) D: 65⅓ in (1654 mm)	(701 kg)

Big Blue® 400 and 500 CC or CC/CV see Literature No. ED/10.8

Designed for fleet owners, construction contractors and rental companies who want a powerful diesel welder/generator and place a premium on rugged reliability with proven performance.



Big Blue 500 CC/CV Deluxe model shown.

Meter maintenance displays

- Fuel gauge
- Hour meter function
- Oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown engine shuts down before system runs out of fuel making restarts easy

CC/CV models have the vault for control board reliability (see pg 67 for details).

Designed and built with reliable, heavy-duty industrial components to allow operation in remote locations, without downtime. **Enclosed robust case design** protects internal components from impact, allows air flow to cool and prolong the life of the engine, and reduces sound levels.

Hot Start™ makes it easy to start all types of Stick electrodes.

Arc-Drive™ enhances Stick welding, especially on pipe, by focusing arc and preventing electrode from going out.

5500-watt peak AC power independent of weld settings means no interaction between tools and the welding arc.

Quick and easy maintenance with single-side access to oil level check, oil fill, oil filter, fuel filter and air cleaner.

CSA, IEC and NEMA compliant.

Heavy Industrial • CC CV DC

Processes

- Stick (SMAW) TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons — 400: rated 5/16 in and capable 3/8 in, 500: rated 3/8 in)
- Stud
- MIG (GMAW)*
- Flux Cored (FCAW)*

 *CC/CV models only.

Diesel Engines

EPA Tier 4i Compliant Choices! 400 — Deutz D 2011 L03i

3-cylinder, industrial, air/oil-cooled

400 — Perkins 404D-22

4-cylinder, industrial, liquid-cooled

500 — Deutz D 2011 L04i

4-cylinder, industrial, air/oil-cooled *Note: Engines are warranted separately by engine manufacturer.*

See distributor for Miller accessories.

*More models are available — see our Web site or Literature	No.	ED/10.8.
---	-----	----------

^{**}Adds Auto Idle, Weld Meters and Optional Generator Power. Note: All models come standard with Engine Gauges.

Diesel	Model	Stock Number*	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
	Big Blue 400 CC	(#907 173) Deutz, 32.0 HP at 1800 RPM (#907 175) Perkins, 32.6 HP at 1800 RPM	DC Stick/TIG	55-500 A	400 A at 36 V (14.4 kW),	Peak: 5500 watts, Continuous: 4000 watts Additional Generator Power for	H: 43 in (1092 mm) W: 28½ in (724 mm)	Deutz 1655 lb (751 kg)
	Big Blue 400 CC/CV Deluxe Model	(#907 327)** Deutz, 32.0 HP at 1800 RPM (#907 329)** Perkins, 32.6 HP at 1800 RPM	DC Stick/TIG/ MIG/FCAW	15-500 A 14-40 V	100% Duty Cycle	Deluxe Model (While NOT Welding) 3-Phase: 15,000 watts or 1-Phase: 12,000 watts	D: 651/8 in (1654 mm)	Perkins 1545 lb (701 kg)
	Big Blue 500 CC	(#907 181) Deutz, 48.6 HP at 1800 RPM	DC Stick/TIG	55-600 A	500 A at 40 V (20 kW),	Peak: 5500 watts, Continuous: 4000 watts Additional Generator Power for	H: 43 in (1092 mm) W: 28½ in (724 mm)	Deutz 1695 lb (769 kg)
	Big Blue 500 CC/CV Deluxe Model	(#907 331)** Deutz, 48.6 HP at 1800 RPM	DC Stick/TIG/ MIG/FCAW	20-600 A 14-40 V	100% Duty Cycle	Deluxe Model (While NOT Welding) 3-Phase: 20,000 watts or 1-Phase: 12,000 watts	D: 651/8 in (1654 mm)	



Big Blue® Air Pak™ See Literature No. ED/10.5

Designed for heavy construction or maintenance and repair contractors, this all-in-one multiprocess welder/generator/compressor and optional AC weld/battery charge/jump-start package sets the standard for power and performance.



Deluxe model shown without the Vandalism Lockout Kit.

Meter maintenance displays

Fuel gauge

Comes complete with Engine Gauges, Auto Idle and 12 V Intake Manifold Heater.

- Hour meter function
- Oil change interval
- · High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown engine shuts down before system runs out of fuel making restarts easy

Ingersoll-Rand ultra-reliable industrial rotary screw air compressor. Belt-driven with automatic belt tensioner.

Independent compressor controls

include an on/off switch for applications not requiring compressed air.

Cold Weather Model — Comes complete with Engine Gauges, Auto Idle, Weld Meters, Battery Lockout/Tagout Disconnect Switch,

Deluxe Model — Comes complete with Engine Gauges, Auto Idle, Weld Meters, Battery Lockout/Tagout Disconnect Switch, 12 V Intake

Manifold Heater, 120 V Oil Pan Heater, Vandalism Lockout Kit, AC/DC/Battery Charge/Jump-Start Switch and Optional Generator Power.

Turbocharged engine provides superior performance in high altitudes.

Quiet. Only 70 dB (95 Lwa) at idle and 79 dB (104 Lwa) at maximum output.

Hot Start™ makes it easy to start all types of Stick electrodes.

Arc-Drive™ enhances Stick welding. especially on pipe, by focusing arc and preventing electrode from going out.

Optional battery charge/jump start for 12 and 24 volt batteries.

Note: Option includes AC weld.

CSA, IEC and NEMA compliant.

Max. Onen-

· Air Carbon Arc Cutting and Gouging

Battery Charger/Jump Start¹

Heavy Industrial

 AC¹/DC Stick (SMAW) • MIG (GMAW)

• AC²/DC TIG (GTAW)

• Flux Cored (FCAW)

Processes

Stud

¹Deluxe model only. ²Deluxe model with HF-251, or all models

with Dynasty® 200 Series.

(CAC-A) (rated 1/2 in carbons)

Diesel Engine

EPA Tier 4i Compliant! Deutz TD 2011 L04

Turbocharged, 4-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

 Desiccant Air Dry System #195 117





Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.

See your Miller distributor for other popular Miller options and accessories.

Stock Number
(#907 062)*
Base Model
(#907 062-04-1)**
Cold Weather Model
(#907 062-07-1)***
Deluxe Model
Deutz
63.4 HP at 1850 RPM

Welding Mode	Weld Output Range	Weld Output Rated at 104°F (40°C) NEMA Amperage and Voltage
CC/DC	20-750 A	600 A at 44 V (26.4 kW), 40% Duty Cycle 550 A at 42 V (23.1 kW), 60% Duty Cycle 500 A at 40 V (20 kW), 100% Duty Cycle
CV/DC	14-40 V	500 A at 40 V (20 kW), 100% Duty Cycle
CC/AC (Deluxe Model Only)	20-575 A	400 A at 36 V (14.4 kW), 100% Duty Cycle
Battery Charge/Jump Start (Deluxe Model Only)	12/24 V	750 A, 12 V, Jump-Start 750 A, 24 V, Jump-Start

Circuit Voltage	Power at 104°F (40°C)
95	Peak: 5500 watts Continuous: 4000 watts
	Additional Generator
56	Power for Deluxe Model
64	(While NOT Welding) 3-Phase: 20,000 watts or
14/28	1-Phase: 12,000 watts

Single-Phase Generator

	Dimensions	Weight
ı	H: 43 in (1092 mm) W: 28½ in (724 mm) D: 69½ in (1765 mm)	Base an Cold Wo Net: 193 Ship: 19 Deluxe Net: 193 Ship: 20

Base and Cold Weather Models
Net: 1931 lb (876 kg)
Ship: 1982 lb (899 kg)

Deluxe Model Net: 1956 lb (887 kg) Ship: 2007 lb (910 kg)

Air	Features	Free Air Delivery	Free Air Delivery	Working Pressure	Duty	Oil	Automatic Compressor
Compressor		at 1850 RPM	at 1235 RPM (Idle)	Constant	Cycle	Capacity	Shutdowns
Ingersoll-Rand CE55 G1	Rotary screw with electric clutch for on/off. Oil change intervals 500 hours (same as engine). Life expectancy 30,000 hours.	60 cfm (1.70 m³/min)	40 cfm (1.13 m³/min)	100 psig 7 bar	100%	5 qt (4.7 L)	Oil Temperature

Big Blue® Turbo see Literature No. ED/10.3

12 V Intake Manifold Heater and 120 V Oil Pan Heater.

Similar to the Big Blue Air Pak, but without the air compressor.



Meter maintenance displays

- Fuel gauge
- Hour meter function
- Oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown engine shuts down before system runs out of fuel making restarts easy

Turbocharged engine provides superior performance in high altitudes.

Quiet. Only 70 dB (95 Lwa) at idle and 79 dB (104 Lwa) at maximum output. Highest output rating available on an engine-driven welder: 20 – 750 A range, 600 amps at 100% duty cycle!

Hot Start™ makes it easy to start all types of Stick electrodes.

Arc-Drive™ enhances Stick welding, especially on pipe, by focusing arc and preventing electrode from going out.

5500-watt peak AC power independent of weld settings means no interaction between tools and the welding arc.

CSA, IEC and NEMA compliant.

Heavy Industrial **Processes**

- Stick (SMAW)
- MIG (GMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 1/2 in carbons,
- capable 5/8 in carbons)
- Stud

Diesel Engine

EPA Tier 4i Compliant! Deutz TD 2011 L04

Turbocharged, 4-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

See distributor for Miller accessories.

Stock Number	Welding Mode	Process	Weld Output Range	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F	(40°C)	Dimensions	Net Weight
(#907 157) Deutz, 63.4 HP at 1850 RPM	CC/DC	Stick/TIG	20-750 A	600 A at 44 V (26.4 kW),	Peak: 5500 watts Continuous: 4000 watts		H: 43 in (1092 mm) W: 28½ in (724 mm)	1755 lb (796 kg)
00.1111 at 1000 111 W	CV/DC	MIG/FCAW	14-40 V	100% Duty Cycle	Continuous. 4000 walls		N. 20 /2 III (724 IIIIII) D: 69 ¹ / ₂ in (1765 mm)	(130 kg)



WELDERS



MillerWelds.com/SpotWelders

Tongs and Tips. Miller offers a wide variety of both symmetrical and asymmetrical tong and tip configurations. Maximum capabilities of spot welders are obtained with minimum tong lengths. Tips are made of durable Class 2, long-wearing copper alloy.

See Literature No. SW/1.0 and SW/3.1 for full range of tongs and tips.





Standard Tip



Air-Cooled Spot Welders see Literature No. SW/1.0

MSW and LMSW Series lightweight, air-cooled units are portable, easy to operate, and provide a quick and effective means for spot welding mild, galvanized or stainless materials.



"T" models include timer panel with a 0 to 5 second weld timer and power on/off switch. Timer panel can be mounted on the optional SWP-2 pedestal or any other convenient location. Includes 10 ft (3 m) input power and interconnecting cords.

Hand lever locks tongs firmly on material, ensuring positive, accurate fit-up.

Accommodates a wide variety of tongs and tips.

Quick and easy adjustment for material thickness.

Reversible for left- or right-hand operation.



Process

• Resistance Spot Welding

Note: Not recommended for welding aluminum, copper or copper alloys.

Most Popular Accessories

- Gyro Bail #041 979 (pg 94)
- Spot Welder Pedestal #040 872
- Spot Welder Timer MSW-41 #041 081 LMSW-52 #041 082

Note: Tongs/tips must be ordered separately. One standard set of tips is supplied with each set of tongs; see diagram above.

See your Miller distributor for other popular Miller options and accessories.

*Tongs and tips must be ordered separately —
see Lit No. SW/1.0 for full range of tongs and tips.

Model/Stock Number*	Input 50/60 Hz	Work Capacity (Combined thickness uncoated mild steel using 6 in [152 mm] tongs)	Rated Output	Rated Output (C 6 in (152 mm)	alibrated with star 12 in (305 mm)	ndard-type tongs) 18 in (457 mm)	Max Open- Circuit Voltage	Dimensions	Net Weight
MSW-41 (#900 371) MSW-41T (#901 345) w/Timer	110 VAC 30 A	1/8 in (3.2 mm) or two pieces of 20 gauge (1.8 mm) galvanized steel	1.5 kVA at 50% Duty Cycle	5550 A	4500 A	3600 A	1.6	H: 6 in (152 mm) W: 3¾ in (95 mm) D: 13 in (330 mm)	22 lb (10 kg) 34 lb (15 kg) w/Timer
LMSW-52 (#900 377) LMSW-52T (#901 357) w/Timer	220 VAC 30 A	3/16 in (4.7 mm) or two pieces of 16 gauge (3.0 mm) galvanized steel	2.5 kVA at 50% Duty Cycle	6750 A	5800 A	4850 A	2.5	H: 6 in (152 mm) W: 3¾ in (95 mm) D: 16 in (406 mm)	30 lb (14 kg) 42 lb (19 kg) w/Timer

Water-Cooled Spot Welders See Literature No. SW/3.1

SSW Series of water-cooled resistance spot welders offer the power needed for light fabrication and sheet metal work.





Built-in squeeze/weld timer makes it quick and easy to set or adjust squeeze and/or weld time in hundredths of

Set-up/weld switch permits checking of tong pressure and alignment without making a weld.

LED display makes it easy to read and see timer settings. Ten-step current control adjusts output current with no change in duty cycle.

Adjustable tong pressure nuts to adjust tong pressure for different thicknesses and applications.

*Coolant system required to operate—order separately. Tongs and tips must be ordered separately — see Lit. No. SW/3.1 for full range of tongs and tips.



Process

· Resistance Spot Welding Note: Not recommended for welding aluminum, copper or copper alloys.

Comes Complete With

- Stationary welding head
- · Remote foot switch
- 37-1/8 inch high all-steel pedestal inclusive of controls and timer
- Air filter, regulator assembly

Note: Order tongs/tips separately to match your applications.

Most Popular Accessories

 Coolant Systems (pg 89) Coolmate™ 3, 115 VAC #043 007 Coolmate™ 3, 230 VAC #043 008 Coolmate™ V3 #043 009 Coolmate[™] 4 #042 288

Model/ Stock Number*	Input 50/60 Hz	Work Capacity (Combined thickness uncoated mild steel using 6 in [152 mm] tongs)	Rated Output	Rated Output (0 6 in (152 mm)	Calibrated with star 12 in (305 mm)	ndard-type tongs) 18 in (457 mm)	Max Open- Circuit Voltage	Net Weight
SSW-2020 ATT (#903 826)	230 VAC, 90 A	1/4 in (6.3 mm)	20 kVA at	12,500 A	10,500 A	9000 A	3.55	185 lb
SSW-2040 ATT (#903 827)	460 VAC, 45 A		40% Duty Cycle					(84 kg)

SUBARC



Miller offers a wide array of versatile Sub Arc components, including digital controllers, tractors, wire feed systems, torches, and power sources. To learn more, visit MillerWelds.com/SubArc

MillerWelds.com/SubArc



Sub Arc DC Series

See Literature No. DC/19.8 and AY/12.0



Optimized for the Sub Arc process, the versatile Sub Arc DC 650 and 1000 also provide Air Carbon Arc cutting and gouging, Stick and Flux Cored capabilities. This Series' arc control provides stable and consistent output regardless of electrode size, electrode type or flux used.

Heavy Industrial



Processes

- Submerged Arc (SAW)
- Flux Cored (FCAW) Stick (SMAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (1/2 in carbons)

Most Popular Accessories

- Flux Hopper with Valve #194 775 (pg 94)
- Self-Propelled Tractor Pkgs (pg 94)
 MT 1500 DX (Digital) #951 060
 MT 1500 A (Analog) #951 061
- See additional Sub Arc Accessories on page 94

See your Miller distributor for other popular Miller options and accessories.

Model	Stock Number	Description	Welding Mode	Amperage/ Voltage Range	Rated Output	Amps 230 V		Rated 0 575 V	utput, KVA	60 Hz KW	Max. Open- Circuit Voltage	Dimensions (Includes lift eye and strain relief.)	Net Weight
Sub Arc DC 650	(# 907 338) 230/460/575 V	CC/CV, DC, Three-Phase	CC	50-815 A 10-65 V	650 A at 44 VDC, 100% Duty Cycle	126	63	50.4	50	34.8	72 VDC	H: 27¼ in (692 mm) W: 22¼ in (565 mm)	545 lb (247 kg)
Sub Arc DC 1000	(# 907 342) 230/460/575 V	CC/CV, DC, Three-Phase	CC	100-1250 A 10-60 V	1000 A at 44 VDC, 100% Duty Cycle	180	90	72	73	53	66 VDC 38 VDC	D: 36 in (914 mm)	644 lb (292 kg)

Automatic Weld Control



HDC 1500 DX HDC 1500 A

HDC 1500 DX #300 438 With Digital Meters **HDC 1500 A #300 439** With Analog Meters

Reliable and flexible Miller digital and analog weld controls interface with AC or DC CC/CV power sources that have remote contactor and output control capabilities. Internal power strips allow interfacing with non-Miller power supplies. Run-in control ensures smoother arc starting and burnback control helps prevent wire sticking on weld termination. Crater time, speed, and output rates can also be controlled with these devices. See page 94 for more accessories. See Literature No. AY/12.0 for more details.

Wire Drive Assemblies



RAD-400 #195 265 Standard-speed, right-angle wire drive assembly for 1/8 in or larger wires.
 RAD-780 #195 266 High-speed, right-angle wire drive assembly for 1/8 in or larger wires.
 SAW4 #300 481 Standard-speed assembly for smaller than 1/8 in wires.

Miller wire drive assemblies operate using 115-volt power and are available for a range of wire diameters. Right angle wire drives (RAD) are designed for larger diameter wires while the SAW4 is optimized for smaller diameters. The RAD-400 and SAW4 have a wire feed speed range of 20–400 inches per minute (0.5–10 MPM). The RAD-780 has a wire feed speed range of 20–780 IPM (0.5–19.8 MPM). Both RAD motors include an adapter plate that allows mounting to 2-1/2 inch (65.5 mm), 4-1/4 inch (108 mm), and 4-5/8 inch (117.5 mm) bolt-hole patterns. See page 94 for recommended drive rolls.

Sub Arc Torches



OBT 600 #043 923 600-amp, 100% duty cycle torch used with 1/16-7/32 in (1.6-5.6 mm) wire. **OBT 1200** #043 900 1200-amp, 100% duty cycle torch used with 1/16-7/32 in (1.6-5.6 mm) wire.

Miller offers a choice of torches for submerged arc welding: OBT 600 (600 amp maximum output) and OBT 1200 (1200 amp maximum output). Both feature a concentric flux flow nozzle and have optional body extensions available. OBT 1200 features a replaceable breakaway adapter end to prevent costly damage should the torch run into an obstruction. See page 94 for torch body extensions and contact tips.



ASMA

CUTTERS





Scan this tag to see videos on Spectrum plasma cutters.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.



MillerWelds.com/PlasmaCutters





	Product Guide	Page	Class	Gouging	Piercing	Rated Output/ Duty Cycle	Rated Mild Steel	Steel Steel Aluminum		Special Features	Typical Applications
	Spectrum® 125C	75	•			12 A at 35%	1/8 in	1/8 in	1/16 in	Built-in air compressor	HVAC, hobbyist, auto body, plumbing
	Spectrum® 375	75	•		•	27 A at 35%	3/8 in	3/8 in	1/4 in	115/230 V dual input voltage	Hobbyist, auto restoration, fabrication
Phase	Spectrum® 375 X-TREME™	76	•			27 A at 35%	3/8 in	3/8 in	1/4 in	Auto-Line™: 115 – 230 V, MVP™ plugs, only 18 lb	HVAC, maintenance, construction
=	Spectrum® 625 X-TREME™	76	•		•	40 A at 50%	5/8 in	1/2 in	3/8 in	Auto-Refire™, automatic air regulation, only 21 lb	Maintenance, light construction, body shops, prototyping
	Spectrum® 875	77			•	60 A at 50%	7/8 in	7/8 in	5/8 in	Auto-Refire™, automatic air regulation, only 52 lb	Construction, maintenance/repair, fabrication
1&3-Ph	Spectrum® 875 Auto-Line™	77	•	•		208: 60 A at 40% 230-380 V: 60 A at 50% 380-575 V: 60 A at 60%	7/8 in	7/8 in	5/8 in	Auto-Line™: 208–575 V, Auto-Refire™, automatic air regulation	Construction, maintenance/repair, fabrication

Engine-Driven Welders	Generator Power	Spectrum 375/375 X-TREME Steel Cut Output Amp Setting**		Spectrum Steel Cut	625 X-TREME Output Amp Setting**	Spectrum 875/875 Auto-Line Steel Cut Output Amp Setting**		
Wildcat® 200	6.5 kW	3/8 in	27 A	3/8 in	30 A	Not Recommended	Not Recommended	
Bobcat™, Trailblazer®	11 kW	3/8 in	27 A	5/8 in	40 A	1/2 in	45 A	
Big Blue® 300 Pro Big Blue® 350 PipePro®	12 kW	3/8 in	27 A	5/8 in	40 A	5/8 in	50 A	
Big 40® CC/CV	15 kW (optional)	3/8 in	27 A	5/8 in	40 A	7/8 in	60 A	
Big Blue® 500 CC/CV	20 kW (optional)	3/8 in	27 A	5/8 in	40 A	7/8 in	60 A	

*Note on cut capacity ratings: The Spectrum Series rating system is designed to provide a guide to help our customers choose the right machine for their application. Rated cut capacity is based on traveling approximately 10 inches per minute to achieve a steady, precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Sever cut is the maximum cut achieved in ideal conditions. Some factors that dictate actual cut speeds, thickness capacity and duty cycles are: types of thermally conductive material being cut, available input power, output power settings and operator technique. For aluminum and other metals with high thermal conductivity, cutting capacities may be derated as much as 30%.

PRODUCT KEY

CLASS: • Light Industrial • Industrial • Heavy Industrial CAPABILITY: • Designed for this process • Capable of this process New! or Improved! products appear in blue type. *See note on cut capacity ratings above. **240 V, full KVA plug. Derate cut capacity with less generator power. For more detailed information, see individual specification sheets.

Cutting w/Engine Drives

PLASMA CUTTERS



Spectrum[®] Series



Each Spectrum model features these technologies (except as noted).

Power Factor Correction (PFC) (not available on 125C model). Uses less energy by utilizing input power more efficiently and increases productivity by reducing nuisance circuit breaker trips.

Miller engine drive generator compatibility.

Industrial, heavy-duty work clamp.

LED indicators for easy troubleshooting.

Non-high-frequency arc starting does not interfere with or damage controls or computers.

Post-flow cooling circuitry extends life of the consumable and torch by cooling them with postflow air after the trigger is released.

Built-in gas/air filter and regulator (not available on 125C model). Provides air filtration of airborne particles 5 microns and larger. Additional filtration and water separation recommended.



These technologies provide reliability and performance others can't match...

See why at MillerWelds.com/reliable

LVC™ line voltage compensation provides peak performance power under variable input voltage conditions for clean, steady cuts.

Wind Tunnel Technology™ (not available on 125C model) prevents abrasive dust and particles from damaging internal components.

Fan-On-Demand™ cooling system only operates when needed, reducing the amount of airborne dust/dirt pulled through the unit.

Spectrum[®] 125C

See Literature No. PC/13.0



Includes Industrial-Grade Technologies/Features (see above)

Built-in, heavy-duty industrial piston-driven compressor provides long life and superior airflow.

Constant-current design offers **consistent 12 amp cutting arc** for continuous quality cutting up to 3/16 in steel.

Auto-Refire™ technology provides ultimate customer convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

35% duty cycle is tested at 104°F (40°C) to give you the cutting power whenever you need it.

Stock Number (#907 149) 120 V, 60 Hz

Rated Output at 104°F (40°C)	120 V	KVA	KW	Dimensions	Net Weight with Torch
12 A at 110 VDC, 35% Duty Cycle	20	2.4	2.0	H: 13 ¹ / ₂ in (343 mm) W: 8 ¹ / ₂ in (216 mm) D: 16 in (406 mm)	31 lb (14 kg)

hove)

Light Industrial O DC 1

Process • Air Plasma Cutting

125C Model Comes Complete With• ICE-12C hand-held torch with

- 20 ft (6.1 m) cable
 Heavy-duty work clamp with
- Heavy-duty work clamp with 20 ft (6.1 m) cable
- 10 ft (3 m) power cord
- Extra consumables
 (2 electrodes, 2 tips)

375 Model Comes Complete With

- ICE-27C hand-held torch with 20 ft (6.1 m) cable
- Heavy-duty work clamp with 20 ft (6.1 m) cable
- 10 ft (3 m) power cord with 115 VAC, 20 A plug
- Extra consumables (3 electrodes, 3 tips and 1 air fitting)
- Built-in gas/air filter and regulator

Most Popular Accessories (pg 93)

• Protective Cover #195 144





- Circle Cutting Guide #195 981
- Standoff Roller Guide #194 883



• MIG Gloves (pg 85)



- No. 30B Economy Cart with Cord Wrap #300 511
- In-Line Air Filter Kit #228 926 (375 model only)

See your Miller distributor for other popular Miller options and accessories.

Spectrum[®] 375

Mild Steel Cutting Capability

Not to scale.



1/4 in (6.4 mm) at 27 IPM



3/8 in (9.5 mm) at 14 IPM Maximum Sever cut of 5/8 in (15.9 mm)



Includes Industrial-Grade Technologies/Features (see above)

Dual input voltage allows either 115 or 230 VAC input power and provides patented protection in case of incorrect switch position.

Electronic pilot arc controller automatically controls the pilot circuit to provide expanded metal cutting capability without having to re-trigger the torch, increasing productivity and extending tip life.

Pressure gauge and pressure knob for manual adjustment of pressure to the torch.

*Recommended 30 A branch circuit for maximum performance.

Stock Number (**#903 891**) 115/230 V, 60 Hz

	Rated Output at 104°F (40°C)	Amps Input a	at Rated Outpu 230 V	it, 60 Hz, 1-I KVA	Phase KW	Compressor Requirement	Dimensions	Net Weight with Torch
Hz	15–27 A at 90 VDC, 35% Duty Cycle	28*	14	3.3	3.2	4.5 CFM (128 L/min) at 90 PSI (621 kPa)	H: 13½ in (343 mm) W: 8½ in (216 mm) D: 16 in (406 mm)	55 lb (25 kg)



Spectrum® 375 X-TREME™ see Literature No. PC/9.2

Mild Steel **Cutting Capability**

Not to scale.

Rated

Maximum Sever cut of

cutting at 27 amps (120 V, 20 A service

with 5-20P MVP or

240 V 6-50P MVP).

5/8 in (15.9 mm) -



Allows for any input voltage hook-up (120-240 VAC,

single-phase, 50/60 Hz) with no manual linking, providing convenience in any job setting.

Includes Industrial-Grade Technologies/Features (see pg 75)

Multi-voltage plug (MVP™) allows connection to 120 or 240 V receptacles without tools - choose the plug that fits the receptacle and connect it to the power cord.

Automatic air regulation automatically compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

X-CASE[™] provides the ultimate protection during transport and storage. Additional space is ideal for MVP plugs, consumables box, gloves, etc.

Shoulder strap allows the end user to easily move from location to location.



Spectrum 375 X-TREME

includes X-CASE!

50/60 Hz

Amps Input at Rated Output, Compressor Net Weight Rated Output at 104°F (40°C) 50/60 Hz, 1-Phase KVA KW Requirement with Torch Stock Number Input Power Dimensions (#907 339) 4.5 CFM 120 V (15 A) 20 A at 88 VDC, 35% Duty Cycle 20.6 2.5 2.3 H: 9 in (229 mm) 18 lb 120-240 V. (128 L/min) W: 51/2 in (140 mm) (8.2 kg)120 V (20 A) 27 A at 92 VDC, 20% Duty Cycle 28.8 3.4 3.2 D: 131/4 in (337 mm) at 90 PSI 27 A at 92 VDC, 35% Duty Cycle 34 (621 kPa)

Spectrum® 625 X-TREME®



Not to scale.

Mild Steel

Cutting Capability

1/4 in (6.4 mm) at 60 IPM



5/8 in (15.9 mm) at 12 IPM

Maximum Sever cut of 7/8 in (22.2 mm)

All Spectrum 625 X-TREME models include X-CASE!

Includes Industrial-Grade Technologies/Features (see pg 75)

Auto-Refire™ provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

Automatic consumable detection detects consumable type installed and adjusts gas pressure to optimize cutting performance, eliminating the need for a manual regulator.

Automatic air regulation automatically compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

X-CASE[™] provides the ultimate protection during transport and storage. Additional space is ideal for MVP plugs, consumables box, gloves, etc.

Shoulder strap allows the end user to easily move from location to location.

Light Industrial • DC 1

Processes

- Air Plasma Cutting
- · Air Plasma Gouging with 625 model

375 Model Comes Complete With

- X-CASE[™] for protection and storage
- ICE-27T hand-held torch with 12 ft (3.7 m) cable
- · Heavy-duty work clamp with 12 ft (3.7 m) cable
- 10 ft (3 m) MVP[™] power cord with MVP[™] plugs 5-15P (115 VAC, 15 A) and 6-50P (230 V, 50 A)
- Consumables box with 3 electrodes
- · Built-in gas/air filter and regulator

625 Model Comes Complete With

- X-CASE[™] for protection and storage • ICE-40T hand-held torch with
- 12 ft (3.7 m) or 20 ft (6.1 m) cable
- Heavy-duty work clamp with 12 ft (3.7 m) or 20 ft (6.1 m) cable
- 12 ft (3.7 m) power cord
- Consumables box with 3 electrodes, 3 tips and deflector
- Built-in gas/air filter and regulator

Most Popular Accessories (pg 93)



• Circle Cutting Guide #195 981

• In-Line Air Filter Kit #228 926



 Standoff Roller Guide #194 883





 Plasma Torch Consumable Kits For ICE-27T #222 939 For ICE-40T #222 940

 MIG Gloves (pg 85)



- X-CASE™ #300 184
- MVP[™] Plugs (375 model only)

See your Miller distributor for other popular Miller options and accessories.

Stock Number (#907 404) 208/230 VAC with 12 ft (3.7 m) Torch (#907 404-01-1) 208/230 VAC with 20 ft (6.1 m) Torch

Amps Input at Rated Output, 50/60 Hz Rated Output at 104°F (40°C) 230 V KW 40 A at 140 VDC, 50% Duty Cycle

Compressor **Net Weight** with Torch Requirement Dimensions 6.0 CFM (170 L/min) H: 9 in (229 mm) 12 ft Torch at 90 PSI (621 kPa) W: 51/2 in (140 mm) 21 lb (10 kg) D: 131/4 in (337 mm) 20 ft Torch 23 lb (11 kg)





PLASMA CUTTERS



Spectrum® 875 and 875 Auto-Line™

See Literature No. PC/9.8



Stock Number

(#907 390-01-1) 208/230 VAC

(#907 390-01-2) 208/230 VAC

(#907 396-00-1) 208-575 VAC

(**#907 396-00-2**) 208-575 VAC

with 25 ft (7.6 m) Machine Torch

with 50 ft (15.2 m) Machine Torch

(#907 396-00-3) 208-575 VAC

with 20 ft (6.1 m) Torch

with 50 ft (15.2 m) Torch

(#907 396) 208-575 VAC

with 20 ft (6.1 m) Torch

with 50 ft (15.2 m) Torch

Mild Steel **Cutting Capability**

Not to scale



1/2 in (12.7 mm) at 34 IPM



7/8 in (22.2 mm) at 11 IPM Maximum Sever cut of 1-1/4 in (32 mm)

Rated Output at

60 A at 140 VDC

60 A at 140 VDC

230 - 380 V: 50%

380 - 575 V: 60%

60 A at 140 VDC

Duty Cycle:

208 V: 40% 230 V: 50% 230 V: 100% at 50 A

Duty Cycle: 208 V: 40%

380-575 V: 100% at 50 A

104°F (40°C)

Duty Cycle:

208 V: 40%

230 V: 50%

Spectrum 875 model shown.



Model

Spectrum

Spectrum

Auto-Line

Auto-Line model with hand-held torch or machine-held torch with CNC/robotic interface.

1-Phase

3-Phase

1-Phase

*Add 1 lb (0.5 kg) for 875 Auto-Line with 50 ft machine-held torch.

Includes Industrial-Grade Technologies/Features (see pg 75)



NEW! Spectrum 875 Auto-Line model allows for any input

voltage hook-up (208 - 575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. Standard Spectrum 875 model operates on 208/230 V. single-phase input voltage only.

Auto-postflow calculates the length of postflow time based on the amount of cutting time to optimize consumable life and eliminate excessive air usage.

Auto-Refire™ provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

Automatic air regulation compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

Compressor

6.75 CFM

at 90 PSI

(621 kPa)

6.75 CFM

at 90 PSI

(621 kPa)

(191 L/min)

(191 L/min)

Requirement

Ultra-Quick Connect™ torch and work cable offers the fastest plasma torch and work cable connection and removal in the industry.

Amps Input at

208 V 47

230 V 42

208 V 28

230 V 25

380 V 15

460 V 12

575 V 10

208 V 47

230 V 42

Rated Output, 50/60 Hz

KVA 9.9

KW 9.8

KVA 9.9

KW 9.4

KVA 9.9

KW 9.7



Dimensions

H: 13½ in

W: 8³/₄ in

(343 mm)

(222 mm)

(470 mm)

18½ in

Net Weight

with Torch

20 ft 51 lb

(23 kg) **50 ft** 62 lb

(28 kg)

(25 kg) 25 ft 59 lb

(27 kg)

(30 kg)³

50 ft 67 lb

20 ft 56 lb

Spectrum 875 is 1-phase only

Process

· Air Plasma Cutting and Gouging

Comes Complete With

- ICE-60T hand-held torch with 20 ft (6 m) or 50 ft (15.2 m) cable; or ICE-60TM machine-held torch (875 Auto-Line model only) with 25 ft (7.6 m) or 50 ft (15.2 m) cable
- · Heavy-duty work clamp with 20 ft (6 m) or 50 ft (15.2 m) cable
- 10 ft (3 m) power cord
- Built-in gas/air filter and regulator
- Extra consumables

Most Popular Accessories (pg 93)

 Protective Cover #300 388



• No. 30B **Economy Cart** with Cord Wrap #300 511



 RTI Filter and Bracket #300 491



 Adapter Cord #300 517





 Cable Covers 20 ft #239 642 25 ft #231 867 50 ft #231 868



• Circle Cutting Guide #195 981

• MIG Gloves (pg 85)

See your Miller distributor for other popular Miller options and accessories.



LOOKING FOR INSPIRATION?

Our Welding Projects section has just that!

Build your next welding project with our Step-by-Step Project Plans that tell you the material and tools you will need to complete the project.

Looking for something more advanced? Search through our Project Idea Gallery that contains more than 800 inspiring projects of all different skill levels.

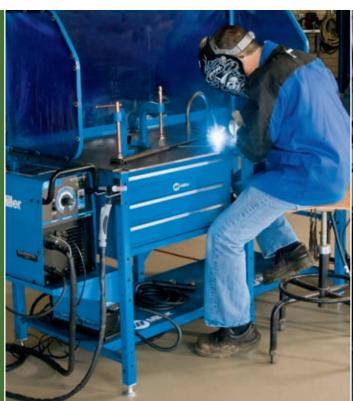
Need some Advice? Chat with any of the 12,000 members in our Welding Discussion Forums. Get answers to questions, advice or share your experiences!

Use Miller to create your next great project at MillerWelds.com/WeldingProjects



WORKSTATIONS

MillerWelds.com/**ArcStation**





ArcStation

The only workbench designed for welders.





Scan this tag to see videos on ArcStation workbenches.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.

Count on Miller to design the perfect workbench to make welding projects faster and easier. The Miller ArcStation is the first-ever, all-in-one workstation designed for welding and metalworking. It's versatile and affordable.

ArcStation makes welding and metalworking easier!

No more welding on the floor or makeshift benches! ArcStation is just the right height to work comfortably. It's properly engineered for the welding process, with smart features designed for safety and convenience. You can organize equipment, tools, and raw materials into one convenient workspace. And you can also customize your workbench with a wide range of handy accessories.

Now available in two series! The original S-Series and new portable F-Series.

Reference the chart below to find out which ArcStation is right for you!

Choose the Right ArcStation

	F-Series	S-Series
Application	Portable, folding workbench ideal for bringing to the job site and saving space	Heavy-duty, sturdy workbench designed to remain set up in a shop or garage
Available Sizes	30 x 30 in	30 x 30 in or 30 x 60 in
Tabletop Style	3/16-in X-pattern	3/16-in solid or 3/8-in X-pattern
Load Capacity	500 lb (227 kg)	1000 lb (454 kg)
Portability	Yes, 74 lb, wheels standard	No
Accessories Available	5-in X-clamps	See accessories on pg 79

WORKSTATIONS



S-Series ArcStation™

The S-Series is perfect for the welder who needs a tough workbench for the fab shop or the home garage.



Four S-Series models available, depending on your needs.

- 30S (30 x 30 in with solid tabletop)
- 30SX (30 x 30 in with X-pattern tabletop)
- 60S (30 x 60 in with solid tabletop)
- 60SX (30 x 60 in with X-pattern and solid tabletop combo)

SX model includes X-pattern tabletop for trouble-free clamping!

Durable 1/8-inch steel frame with cross bar and heavy-duty tabletops provide a sturdy area for welding or metalworking.

Lower shelf provides a convenient place to store equipment, tools and raw materials.

Adjustable leveling feet keep bench rock-steady.

Customize with a wide range of handy accessories to make this the ultimate workbench (see at right).

Most Popular Accessories

Miller's ArcStation accessories allow you to get the most out of your ArcStation.

- 1 X-clamps 6-inch #300 613 5-inch #300 850 (not shown)
- 2 Side Shelf #300 680
- 3 Tool Chest with Ball-Bearing Slides #300 610
- 4 Interior Shelf #300 679
- 5 Quick-Remove Vise 5-in Vise/Mount #300 611 Mount only #300 612
- 6 Weld Curtain 30 Series #300 685 60 Series #300 686
- 7 Casters #300 849 (not shown in 60SX photo at left)



Convenience Kit #300 614 includes the following:

- 8 Gun Holder
- 9 Tool Holder
- 10 Clamp Bar

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.



F-Series ArcStation

When portability or space-savings is a concern, the F-Series ArcStation is your solution.



Wheels, handle, and fold-up design make unit easy to take to the job site or move around the shop.

Compact size makes storing unit a breeze. Unit folds down to 6 x 29 x 48 in (152 x 737 x 1219 mm).

30 x 30 inch size tabletop provides plenty of work surface.

3/16-inch X-pattern steel tabletop allows trouble-free clamping.

1.5-inch diameter steel tube frame provides strength and durability. Includes removable gun holder.

Add the optional 5-inch X-clamps (#300 850) to make this the *ultimate* portable workbench.



ArcStation Models	30FX (#300 837)	30S (#951 167)	30SX (#951 168)	60S (#951 169)	60SX (#951 170)
Steel Top	(1) 29 x 29 x 3/16-in X-Pattern	(1) 29 x 29 x 3/16-in Solid	(1) 29 x 29 x 3/8-in X-Pattern	(2) 29 x 29 x 3/16-in Solid	(1) 29 x 29 x 3/8-in Solid (1) 29 x 29 x 3/8-in X-Pattern
Load Capacity	500 lb (227 kg)	1000 lb (454 kg)	1000 lb (454 kg)	1000 lb (454 kg)	1000 lb (454 kg)
Dimensions	35 x 29 x 35 in (889 x 737 x 889 mm)	35 x 29 x 29 in (889 x 737 x 737 mm)	35 x 29 x 29 in (889 x 737 x 737 mm)	35 x 58 x 29 in (889 x 1473 x 737 mm)	35 x 58 x 29 in (889 x 1473 x 737 mm)
Weight	74 lb (34 kg)	123 lb (56 kg)	177 lb (80 kg)	230 lb (104 kg)	318 lb (144 kg)



EXTRACTION





to see FILTAIR in action.



MillerWelds.com/FumeExtraction



Choose the Right Fume Extractor

Fume Extractor	FILTAIR™ 130	FILTAIR™ MWX-S and MWX-D	FILTAIR™ SWX-S and SWX-D
Application	Portable, high-vacuum unit ideal for MRO, contractors and intermittent welding	Mobile systems designed for manufacturing and fabrication shops, schools and training facilities	Stationary systems designed to maximize floor space in manufacturing and fab shops, school and training facilities
Source/Submicron Capture	Yes	Yes	Yes
Filter Type	Manually cleanable filter	MWX-S: Self cleaning filter mechanism* MWX-D: Disposable filter	SWX-S: Self cleaning filter mechanism* SWX-D: Disposable filter
Filter Media Area	16 ft² (1.49 m²)	490 ft ² (45.52 m ²)	490 ft² (45.52 m²)
CFM (Airflow)	132	875	875
Accessories	3 optional magnetic nozzles and a fume gun	1 arc sensor/light kit	1 arc sensor/light kit

^{*}Self-cleaning filter mechanism is designed to increase productivity by greatly extending filter life, saving both filter costs and downtime.

FILTAIR™ 130

See Literature No. AY/3.1

Portable weld fume extractor designed with 132 CFM and a high-efficiency cartridge filter to collect weld fume particles at the source.

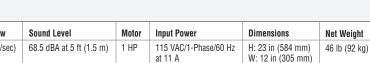


Highest performing filter in the industry will last longer and capture the smallest submicron (<1 micron) particles. Miller's filter is manually cleanable and the unit features a fume collection tray to minimize maintenance.

Less noise. One of the quietest portable systems in the industry at 68.5 dBA at 5 ft.

Easy to use. Adjustable airflow control allows you to change your airflow capacity for different welding applications.

Portable and compact unit has castor wheels and handle bar to increase portability, allowing operators to maneuver into small spaces or hard-to-reach areas. Includes 20 ft power cord and an 8 ft collection hose.



Processes

- Stick (SMAW) Flux Cored (FCAW)
- MIG (GMAW) TIG (GTAW)

Comes With

• Filter • 8 ft collection hose

Most Popular Accessories

 Collection Hose 17 ft (5.2 m)

#300 672 34 ft (10.4 m) #300 673



Magnetic Nozzles

11.8 in (300 mm) width #300 669 23.6 in (600 mm) width #300 670



- Flexible Funnel Magnetic Nozzle #300 668
- Disposable Filter #300 671



• Bernard® Clean Air Gun Series Ideal for almost any heavy-duty MIG welding application. Attaches to FILTAIR 130 with gun adaptor and available in 400 and 600 A models. Contact Bernard® at 1-800-946-2281 to order.

NEW

SWX-D (disposable

filter) model with 7 ft

extraction arm shown.

You Tube

FUME EXTRACTION



FILTAIR MWX and SWX Series See Literature No. AY/3.0 and AY/3.2

Experience extended filter life, increased efficiency and cleaner air with our advanced nanofiber filter technology. Both the MWX (mobile) and SWX (stationary) source capture systems include an S model (self cleaning) and D model (disposable filter).



Designed exclusively for

welding applications.

The SWX Series of

stationary wall-mounted

floor space, plus allows

the flexibility to connect

one or two extraction

arms to extend fume

extraction capability.

fume extractors maximizes

Features Common to All Models

Superior filter life from Miller's exclusive MERV 15 nanofiber filter ensures capture of submicron weld fumes, more holding capacity and the ability to maintain low pressure drop—resulting in a longer lasting filter and a cleaner work space.

MERV 15 rating of FILTAIR nanofiber filters is the highest in the industry. Up to 95% of weld fumes are submicron and FILTAIR filters capture 85–95% of these particles.

Strong suction power of 875 CFM delivers long-lasting airflow throughout the life of the filter.

Extraction arm is obstruction free so air can pass through with less airflow resistance, giving you stronger CFM (airflow).

Self-Cleaning Models Additional Features

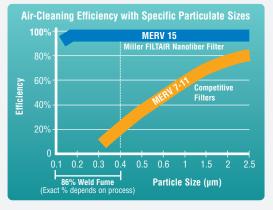
Self-cleaning filter technology features an innovative filter cleaning mechanism designed to increase productivity and greatly extend filter life.

One-minute cleaning cycle operates with a push of a button on the control panel.

Miller's nanofiber filter is surface loading. Weld fume does not penetrate deep into the filter. This enables particles to be easily released during the cleaning process and keeps pressure drop low.

Disposal drawer provides easy and convenient access to empty out collected particles. Handle releases drawer allowing it to slide out.

Note: Compressed air required to operate cleaning mechanism.



Processes

- Stick (SMAW)
- Flux Cored (FCAW)
- MIG (GMAW)
- TIG (GTAW)

Comes With

• Filter

Most Popular Accessories

 Replacement Filters

Self-Cleaning Filter #300 540

Disposable Filter #300 539

Nanofiber cartridge filter features an ultra-thin surface webbing of tiny fibers to capture weld fumes on the surface of the filter instead of within. This extends the filter life, maintains longer lasting air flow, and lengthens your maintenance intervals. FILTAIR's MERV 15* filter provides higher efficiency and

*MERV (Minimum Efficiency Reporting Value) is between 1 and 16. A higher MERV indicates a more efficient filter and is more effective against submicron-sized particles .30 to 1.0 micron.

longer filter life overall.

• Hood Light with Arc Sensor For MWX Series #300 689 For SWX Series #300 763



Illuminates the welding zone and enables the fume extractor to start automatically when welding begins.



• SWX Dual Arm Add-On Packages SA-W807 Dual Arm (7 ft arm) #951 344

SA-W810 Dual Arm (10 ft arm) #951 345

SA-W812 Dual Arm (12 ft arm) #951 346

Packages include arm, blower and back draft dampers to turn a single-arm weld fume extractor into a dual-arm extractor.

 SA-W Arm Ducting Kit #300 771 Includes a supporting bracket, collar and hardware for connecting an arm to existing duct work.

Model/Stock Number		Filter Media	Nominal Airflow	Extraction Arm Diameter	Sound Level	Motor	Input Power	Dimensions	Net Weight
MWX-S (Self-Cleaning) Models (#951 178) 7 ft extraction arm (#951 179) 10 ft extraction arm (#951 180) 12 ft extraction arm	MWX-D (Disposable Filter) Models (#951 143) 7 ft extraction arm (#951 144) 10 ft extraction arm (#951 145) 12 ft extraction arm	490 ft ² (45.52 m ²)	875 CFM (413 L/sec)	8 in (203 mm)	Approximately 70 dBA at 5 ft (1.5 m)	1 HP, 3450 RPM	115 V/1-Ph/ 60 Hz at approximately 11.9 A	H: 34¾ in (883 mm) W: 31¾ in (806 mm) D: 48 in (1219 mm)	MWX-S 300 lb (136 kg) MWX-D 238 lb (108 kg)
SWX-S (Self-Cleaning) Models (#951 339) 7 ft extraction arm (#951 335) 10 ft extraction arm (#951 340) 12 ft extraction arm	SWX-D (Disposable Filter) Models (#951 336) 7 ft extraction arm (#951 337) 10 ft extraction arm (#951 338) 12 ft extraction arm	490 ft ² (45.52 m ²)	875 CFM (413 L/sec)	8 in (203 mm)	Approximately 74 dBA at 5 ft (1.5 m)	1 HP, 3450 RPM	115 V/1-Ph/ 60 Hz at approximately 11.9 A	SWX-S H: 33 in (838 mm) SWX-D H: 29 in (737 mm) W: 27 ¹ / ₄ in (692 mm) D: 33 in (838 mm)	SWX-S 195 lb (88 kg) SWX-D 130 lb (59 kg)



WELDING

PROTECTION

We're redefining welder protection with products that provide optimal fit, comfort, performance and style, resulting in safer, more productive work environments.

THAT'S THE ARC ARMOR™ DIFFERENCE.

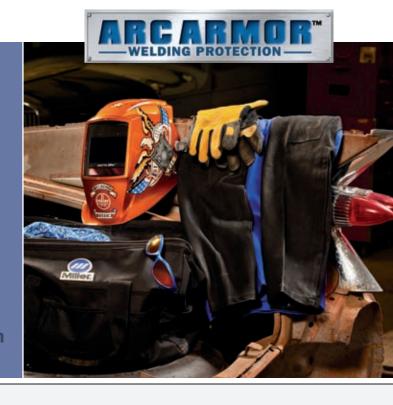




Scan this tag to discover a new revolution in welder protection.

Get the free mobile app at http://gettag.mobi See page 2/3 for more information.

MillerWelds.com/WeldingProtection





Head and Face

Titanium Series™

Industrial Helmets for the Most Extreme Welding and Grinding Applications

- 1 Titanium 9400i #245 804
- 2 Titanium 9400 #245 801
- 3 Titanium 7300 #245 800
- 4 Titanium 1600 #245 799
- Aluminum heat shield protects analog lens in high amperage applications
- Durable shock-absorbing gasket protects lens from drop impact



Digital Elite™ Series

Ultimate Helmets PLUS Four Modes of Digital Versatility for Most Welding and Cutting Applications

- 5 Black #241 979
- 6 Stars and Stripes II™ #234 762
- 7 Vintage USA™ #236 340
- 8 Inferno™ #234 761
- 9 Wicked™ #241 462
- **10** Lucky's Speed Shop™ #237 745
- 11 The Joker™ #235 041
- 12 NEW! Digital Camo #248 260
- X-mode eliminates:
- Sunlight interference
- Low-amp lens opening —TIG
- Lens opening from obstructed sensors — hidden/cavity welds
- Lens opening pipe/curves



WELDING PROTECTION



Elite Series"

Ultimate Helmets for Most Applications

- 13 Black #241 975
- 14 Stars and Stripes II™ #234 065
- 15 Vintage USA™ #237 838
- 16 Inferno™ #222 669
- 17 Wicked™ #241 464
- 18 Lucky's Speed Shop™ #237 744
- 19 The Joker™ #227 187
- 20 Camouflage #227 188
- 21 NEW! Hockey Canada™ #245 135
- 22 NEW! Sinister™ #250 088



Performance Series"

Mid-Range Helmets for Most Applications

- 23 Black #232 035
- 24 America's Eagle™ #232 036
- 25 Motorsports™ #232 039
- Blue Rage™ #241 458
- Fireball™ #234 514
- Camouflage #241 460
- 29 NEW! '64 Custom #250 532



Pro-Hobby™ Series

Ideal Helmets for Light-Duty Applications

- Black #231 404
- Fixed Shade #10 Black #231 703
- 31 American Eagle™ II #231 405
- Red Flame #231 408
- Millermatic™ #231 406
- 34 Camouflage #231 407
- **NEW!** Blue Heat #250 366



MP-10™ Series

Black #235 626 (6 Pk) #238 497 (Each)

Inferno™ #235 627 (6 Pk) #238 496 (Each)

- Passive shade 10 lens
- Upgradeable to auto-darkening lens

Hard Hat Adapter

#213 110 (XL and XLi) #222 003 (All other Miller Series)



· Compatible with Fibre Metal and MSA hats. Other brands may fit depending on size and shape. Helmet and hat not included.

2x4 Auto-Darkening Lens

#770 660 (Shade 8) #770 659 (Shade 9)

#770 226 (Shade 10)

- Fits all 2x4 inch windows
- · Solar powered and 2 arc sensors
- Light state shade 3
- 2-year warranty

Safety Glasses

#238 979 (Black, clear lens)

#235 656* (Black, smoked lens) #235 655* (Blue, smoked lens)

#235 662* (Black, shade 3 lens) (Blue, shade 3 lens) #235 661*

(Orange, shd 3 lens) #235 663* #235 658

(Black, shade 5 lens) #235 657 (Blue, shade 5 lens) #235 659 (Orange, shd 5 lens)

- Form fitting orbital eye coverage
- ANSI Z87.1 compliant





WELDING PROTECTION

Hand and Body

Industrial Gloves (See Size Chart)



- · Premium side split cowhide for extreme durability
- Aluminized insulation reflects radiant heat



- · Exclusive pre-curved form-fitting pattern conforms to the natural shape of the hand
- . Moisture-wicking cotton fleece lining for additional protection



• Extra long 9-in cuff for additional protection

· Fully welted seams for extended life



- · Unlined pigskin leather palm provides superior dexterity
- · Reinforced palm patch for added comfort

Industrial Welding Apparel



1 Classic Cloth Jacket (See Size Chart)

- · Barracuda-style collar
- · Convenient inside pocket

2 Classic Cloth Cape Sleeves (See Size Chart)

- · Allows for bib attachment (sold separately)
- Barracuda-style collar
- · Fold-in sleeve snaps

3 Classic Cloth Bib #247 147

- 19-in length
- Attaches to cape sleeves

4 Classic Cloth Apron #247 149

- 35-in length
- · Adjustable drawstring

5 Classic Cloth Sleeves #247 148

- 18-in length
- · One-handed cinch closure

9 NEW! NEW! NEW! NEW! **NEW!**) **WELD X** [™] Apparel • 7 oz WeldX provides extreme flame-resistant properties and repels sparks, spatter and molten metals · Machine washable pre-shrunk fabric Chromium free

- · Finished hems and reinforced stitching

6 WeldX Jacket (See Size Chart)

- WeldX front and flame-resistant navy cotton back
- · Vented back and extended rear tail
- Zipper closure with Velcro® storm flap
- Accessible inside pocket

7 WeldX Cape Sleeves (See Size Chart)

- Allows for bib attachment (sold separately)
- · WeldX front and flame-resistant navy cotton back
- · Barracuda-style collar
- Fold-in sleeve snaps

8 WeldX Bib #247 147

- 19-in length
- Attaches to cape sleeves

9 Weldx Apron #247 149

- 35-in length
- · Adjustable drawstring

10 WeldX Sleeves #247 148

- 18-in length
- · One-handed cinch closure

Size	Chart (Gloves)				Size	Chart (Apparel)								
SS	Glove	Medium	Large	X-Large	亨	Apparel	Small	Medium	Large	X-Large	2X-Large	3X-Large	4X-Large	5X-Large
Gloves	HD MIG/Stick	_	#249 193	#249 194	Apparel	Classic Cloth Jacket	#244 749	#244 750	#244 751	#244 752	#244 754	#244 755	#244 756	#244 758
84 GI	MIG	_	#249 195	#249 196		Classic Cloth Cape Sleeves	#247 138	#247 139	#247 140	#247 142	#247 143	#247 144	#247 145	#247 146
P. S.	MIG (Long Cuff)	_	#249 197	#249 198	8	WeldX Jacket	#247 114	#247 115	#247 116	#247 117	#247 118	#247 119	#247 120	#247 121
	TIG	_	#249 199	#249 200	E E	WeldX Cape Sleeves	#247 122	#247 123	#247 124	#247 126	#247 127	#247 128	#247 130	#247 131
	HD MIG/Stick	#249 172	#249 173	#249 174		INDURA Cloth Jacket	#231 072	#231 073	#231 074	#231 075	#231 076	#231 077	#231 078	#231 079
8	MIG	#249 175	#249 176	#249 177										
틢	TIG	#249 178	#249 179	#249 180	프	Combo Jacket	#231 080	#231 081	#231 082	#231 083	#231 084	#231 085	#231 086	#231 087
- E	TIG (Short Cuff)	#249 181	#249 182	#249 183	<u></u>									
Pg 8	Multi-Purpose	#249 184	#249 185	#249 186		Leather Jacket	#231 088	#231 089	#231 090	#231 091	#231 092	#231 093	#231 094	#231 095
	Metalworker	#227 818	#227 819	#227 820										





WELDING PROTECTION



Hand and Body

Gloves (See Size Chart)



- · Breathable pigsplit back with top grain cowhide palm provides utmost protection
- FR cotton fleece lining with exclusive channeled foam



- · Breathable pigsplit back with genuine American deerskin palm for ultimate comfort
- Moisture-wicking fleece lining provides additional protection



- · Durable goatskin back and palm for extended wear and ultimate dexterity
- · FR cotton fleece back and padded palm provide excellent protection



TIG (Short Cuff)

- Durable pigsplit back with goatskin palm provide superior protection and dexterity
- 3-in cuff for additional mobility



Multi-Purpose

Accessories

- · Breathable pigsplit back with top grain cowhide palm for excellent heat protection
- · Moisture-wicking mesh lining and padded palm



Metalworker

- · Spandex backing and goatskin palm provide optimal comfort
- Neoprene wrist with Velcro® closure for better fit and support

Welding Apparel





INDURA® Cloth Jacket (See Size Chart)

- INDURA® flame-resistant cotton (flame resistant guaranteed for life of jacket)
- · Nomex® flame-resistant thread
- · Allows for patented bib/apron attachment



Combo Jacket (See Size Chart)

- INDURA® flame-resistant cotton (flame resistant guaranteed for life of jacket)
- Premium top grain leather
- Allows for patented bib/apron attachment



Leather Jacket (See Size Chart)

- Premium top grain leather
- · Expandable leather strategically placed for optimal mobility
- Satin lined
- · Tapered, athletic cut



Job-Site Tool Bag #228 028

- Over twenty separate pockets
- Opening of 12 x 18-1/2 in (305 x 470 mm)



- · Bandannas have a sewn-in sweatband
- Caps are reversible with a low, soft bill
- See your distributor for styles and sizes

Protection Paks



- Starter Pak (includes #231 404 Pro-Hobby[™] helmet) #239 725 Large #239 726 X-Large #240 885 2X-Large
- **Performance Pak** (includes #232 035 Performance™ helmet) #240 886 Large #240 887 X-Large #240 888 2X-Large



Combo Sleeves #231 096

- INDURA® flameresistant cotton/ top grain leather
- 21 in (533 mm) length



Bib/Apron #231 125

 Attaches to INDURA® Cloth and Combo Jackets with snaps across the chest as a bib or along the



bottom as an apron



#235 671 With Auto-Darkening Lens Assy #237 811 Without Auto-Darkening Lens Assy

- · Lightweight design provides all day comfort
- · Comfortable load-bearing shoulder straps for extended wear • Two air speeds for increased comfort in varied working conditions
- · Audible and vibrating alarms notify user in noisy environments
- · Low-profile blower design for unrestricted movement

Heat Stress



CoolBand" Integrated Headgear Cooling System #244 094

- Provides all-day comfort through optimized airflow distribution
- Up to 8°F cooler under the hood
- Strategically placed air vents reduce fogging Constant air movement removes stagnant air
- · Removable air deflector provides airflow adjustability
- Compatible with most Miller Helmets*



CoolBelt™

Belt-Mounted Cooling System #245 230

- Provides all-day comfort through maximized airflow power
- Up to 17°F cooler under the hood
- Multiple airflow speeds eliminate stagnant air and reduce fogging
- · Lightweight design extends wearability
- Compatible with most Miller Helmets*
- *MP-10™. Elite™ and Titanium™ Series.



ACCESSORIES



MillerWelds.com/Accessories





The right welding and cutting accessories increase convenience, save time and money, perform better and help you meet the demands of any job.

Contents

Aluminum MIG Welding 27-29

See Spoolmate, Spoolmatic, and XR-Control System

Automated Manufacturing System Accessories 86

Cable Connectors and Adapters 87

Carts, Cylinder Racks and Running Gear 87—88, 90, 93

Coolant Systems 89

Engine Drive Accessories 90-91

- **■** Generator Accessories **■** Maintenance
- Package Expansions Portability
- Protection Trailers

Load Banks 91

Meters 91

MIG Accessories 91

■ Accessory Kits ■ Protective Covers ■ Pulsing Control

MIG Guns and Accessories 92

Plasma Cutter Accessories 93

- Cable Covers Cart Cutting Guides Filters
- \blacksquare Plugs and Cords \blacksquare Protective Covers \blacksquare Torches

Polarity Switches/Controls 93

Remote Controls 94, 95

Spot Welder Gyro Bail 94

Stick Accessory Kits 94

Sub Arc Accessories 94

- **■** Consumables Handling **■** Control Accessories
- Drive Assembly Drive Rolls
- **■** Torch Accessories and Tips **■** Welding Carriages

TIG Accessories 95

- **■** High-Frequency Arc Starters and Stabilizers
- Kits Modules Protective Covers
- Remote Controls

Wire Feeder Accessories 96

- **■** Control Detachment Kits **■** Extension Cables (14-pin)
- **Extension Hose and Cable Kits**
- Power Supply Adapters Secondary Contactor
- Spool Adapter Spool Gun Controls
- Spoolmate 3035 Spool Gun Turntable Assembly
- **■** Wire Straightener

Aluminum MIG Welding

See Spoolmate, Spoolmatic and XR-Control System on pages 27–29.

Automated Manufacturing System Accessories

For adapters and drive motors, visit MillerWelds.com.



Coolant Flow Switch #195 461

For Auto-Axcess. To ensure coolant is flowing in the system. Lack of coolant flow may cause damage to water-cooled guns. Module allows wiring into the peripheral connector port. 50 ft (15.2 m) cable with connector and separate shell connector for simple modification to desired length in the field. It can be mounted on Auto-Axcess or as desired elsewhere. 1/4-turn quick connection.

MCS-2 Motorized Cross Slide

#098 380 Control

#045 623 Adapter Plate*

Provides accurate weld head adjustment with convenient motorized control. Used to align the welding head (gun) to the weld joint, by providing vertical or horizontal adjustments, based on mounting preferences.

*Required when using two slides.

ACCESSORIES

Cable Connectors and Adapters

For AlumaFeed System, Invision 352 MPa, CST 280, Maxstars, Dynastys, Syncrowaves, and XMT 304 and 350. These power sources are equipped with Dinse- or Tweco-style connectors for secondary connections. Power sources are shipped with two male plugs for use with #4 to #1/0 AWG cable size.

Dinse-Style Connectors #042 418

Accepts #4 to #1/0 AWG cable size. **#042 533**

Accepts #1/0 to #2/0 AWG cable size. Kits include one Dinse-style male plug which attaches to the work and/or weld cables and plugs into the Dinse-style receptacles on the power source.

Extension Kits for Dinse-Style Cable Connectors #042 419

Accepts #4 to #1/0 AWG size cable. **#042 534**

Accepts #1/0 to #2/0 AWG size cable. Used to adapt or extend weld and/or work cables. Kit includes one male Dinse-style plug and one in-line female Dinse-style receptacle.



Tweco®-Style Connector #195 115 Accepts #1/0 to #2/0 AWG cable size. Kit includes one Tweco-style male plug which attaches to the work and/or weld cables and plugs into the Twecostyle receptacles on the power source.



Thread Lock Connectors #225 029

For Maxstar 700 and Dynasty 700. Contains two male connectors that accept #1/0 to #4/0 AWG size cable.



Dinse/Tweco® Adapter #042 465 Dinse/Cam-Lok Adapter #042 466

One-piece adapter with Dinse-style male plug (to power source) on one end and Tweco or Cam-Lok female receptacle (for weld cable connection) on other end.



Tweco®/Dinse Adapter #195 116 One-piece

adapter with Tweco-style male plug (to power source) on one end and Dinse-style female receptacle (for weld cable connection) on other end.

Air-Cooled TIG (GTAW) Torch Adapters



#195 234
For Maxstar 150.
25 mm (small)
Dinse-style flow

thru for (WP17, WP9, WP50) one-piece torch.



#194 722

For Syncrowave 200. 50 mm Dinsestyle flow thru for (WP17, WP9, WP50, WP23) one-piece torch.



#195 379 (WP26) #195 378 (WP17, WP9, WP50, WP23) For CST 280, Maxstar 200 and 350, Dynasty 200 and 350, and Syncrowave 250 and 350. 50 mm Dinse-style for one-piece torch.

Water-Cooled TIG (GTAW) Torch Adapters



#195 380

For Syncrowave 200. 50 mm
Dinse-style flow thru with gas and water return lines for (WP125, WP24W, WP25, and WP20) water-cooled torch.



#195 377

For Maxstar 200 and 350, Dynasty 200 and 350, and Syncrowave 250 and 350. 50 mm Dinsestyle with water return line for

(WP125, WP24W, WP25, WP20, WP18, WP12, CS310, CS410, WP22, WP27) water-cooled torch.



#225 028

For Maxstar 700 and Dynasty 700. 50 mm thread lock-style for (WP125, WP24W, WP25, WP20, WP18, WP12, CS310, CS410, WP22, WP27) water-cooled torch.

Carts, Cylinder Racks and Running Gear

See also Engine Drive Accessories and Plasma Accessories.



Carrying Cart #056 301

For smaller Maxstars, CST 280, XMTs, and wire feeders. Cart is 34 in high x 30 in wide x 17 in deep (864 x 762 x 432 mm).



Cylinder Cart #042 537

For Invisions, CST 280, and XMTs. Has adjustable handles and is slanted for convenient access to power source front panel controls. Carries two 160 lb (72.6 kg) gas bottles or one gas bottle and one Coolmate V3 for TIG welding. Feeder mounted to tray above power source. Accommodates Coolmate 3 or 4 coolant systems.



Feeder Cart #142 382

A low-profile, creeper cart which allows the operator to easily move the feeder around the work area.



Universal Cart and Cylinder Rack #042 934

For Invision 352 MPa, CST 280, Maxstar 200 Series, Dynasty 200 Series, Diversion 165 and 180, and XMT 304 and 350. Also accommodates gas cylinder up to 56 in (142.2 cm) high measuring 6 to 9 in (15.2 to 22.8 cm) in diameter. Provides storage for auxiliary items such as electrodes, helmets and gloves.



2-Wheel Trolley Cart #300 480 For Maxstar

200 Series and Dynasty 200 Series to be used with or without Coolmate 1. Easy-to-maneuver two-wheel cart features singlecylinder rack,

chain for cylinder, straps (quick and easy to detach and carry machine), cable holders, torch holder, storage area, and filler rod storage area.



Runner™ Cart #300 244

For Maxstar 350 and 700, and Dynasty 350 and 700 to be used with or without Coolmate 3.5. Cart features single cylinder rack, foot pedal holder, (3) cable/torch holders, (2) TIG electrode filler holders and a convenient drawer for tungsten and consumable storage.



For AlumaFeed System, Invision 352
MPa, and XMT 304 and 350. Small
contrint and easily maneuverable, with

cylinder rack low enough that you do not have to lift bottles. Durable, heavy-duty ergonomic handles are designed for comfort.



Running Gear Cylinder Rack #300 408

For Invision 352 with dual feeder, Invision 456 models, Axcess 300 and 450, and XMT 456. Holds two large gas cylinders and has gun cable hangers and a consumable drawer in front for easy access. A convenient handle allows the cart to be pulled easily through doorways. System components including power source, single or dual feeders, and CoolmateTM V3 can be mounted to the cart and secured.



Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack #300 337

For Millermatic 212 Auto-Set, and 252. Allows operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

Elevated Gun and Cable Rack #300 335

For Millermatic 212 Auto-Set, and 252. For use with single cylinder rack. (Included with Dual EZ-Change Low Cylinder Rack.)



Dual Cylinder Rack #195 299 For Millermatic 300/350P. Replaces single cylinder rack.



No. 19 Running Gear #041 580 For Dialarc 250 AC/DC. Four 8 in (203 mm) poly/rubber-blend wheels with 30 in (762 mm) towing handle.

No. 20 Running Gear #041 581 For SRH-444. Includes four 8 in (203 mm) poly/rubber-blend wheels and a 30 in (762 mm) towing handle.



No. 37 Running Gear #195 282
For Syncrowave 250 DX and 350 LX.
Includes two 10 in (254 mm) wheels, two 5 in (127 mm) casters, two-compartment rack (for gas cylinder(s) or Coolmate V3 coolant system), and handles. Provides excellent mobility and easy to install.



No. 39 Running Gear #300 009
For Syncrowave 200. Includes low
cylinder rack, two 8 in (203 mm)
wheels and two 4 in (102 mm) casters.
Has two-compartment, integrated filler
material storage and will accommodate
one gas cylinder up to 60 in (152 cm)
high and 9 in (23 cm) in diameter.



Shopmate 300 Running Gear/ Dual Cylinder Rack #300 145

For Shopmate 300/300 DX. The large 10 in (254 mm) rear wheels and 5 in (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source. Very easy to install. Handles double as a cable holder. Holds two cylinders.



Premium Running Gear/ Cylinder Rack #770 187

For Millermatic 140 Auto-Set, 180 Auto-Set, 211 Auto-Set, and Diversions. Heavy-duty construction. For gas cylinders no larger than 7 in (178 mm) diameter, maximum weight 100 lb (45 kg).



Standard Running Gear/ Cylinder Rack #300 425

For Millermatic 140 Auto-Set, 180 Auto-Set, 211 Auto-Set, and Diversions. Durable construction. For gas cylinders no larger than 7 in (178 mm) diameter, maximum weight 75 lb (34 kg).



Standard Running Gear #042 886 For CP-302, Deltawelds, Gold Stars,

and Dimensions. The 10 in (254 mm) rear wheels and 5 in (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source. Very easy to install. Handles double as a cable holder.

Standard Cylinder Rack #042 887 Installs on Standard Running Gear (#042 886) only.



Thunderbolt XL Running Gear #043 927

Mounts easily to unit and provides convenient portability. Includes two wheels, two feet and a handle.

Coolant Systems See Literature No. AY/7.2





Coolmate™ 1 #300 360 115 VAC #300 459 230 VAC

For Maxstar 200 Series, Dynasty 200 Series, and Syncrowave 200. Light industrial, 1-gallon cooler designed for water-cooled torches on power sources rated up to 200 A*.

Coolmate™ 3 #043 007 115 VAC #043 008 230 VAC

Economical, 3-gallon cooler designed for water-cooled torches rated up to 500 A*.

Coolmate™ V3 #043 009

Vertical, 3-gallon cooler designed for water-cooled torches rated up to 500 A*. Coolmate™ 3.5 #300 245

For Maxstar 350 and 700, and Dvnastv 350 and 700. Industrial. 3.5-gallon cooler designed for watercooled torches rated up to 600 A*.

Coolmate™ 4 #042 288

The best performer in its class industrial, 4-gallon cooler designed for water-cooled torches rated up to 600 A*.

Coolmate™ 3X #300 419

Industrial, 3-gallon cooler designed for water-cooled torches rated up to 500 A*. Includes wheels, handles and dual cylinder rack.



For Syncrowave 250 DX and 350 LX.





or systems where aluminum is in

coolant path/circuit.

Aluminum-Protecting Coolant (Green, Pre-Mixed) #043 809 Primarily used in push-pull systems where aluminum is in coolant path/circuit and high frequency is NOT used.

contain a base of ethylene glycol and

deionized water to protect against freezing to

*May vary with torch design and cable length. Miller coolant systems are backed by the best warranty in the industry — 1 full year.

Model	Motor Input Voltage	Maximum Current Draw	Maximum Cooling Capacity	IEC Cooling Capacity	Tank Capacity	Dimensions	Net Shipping Weight
Coolmate 1	115 VAC, 60 Hz	2.1 A (60 Hz)	2850 W (9700 BTU/hr)	1210 W (4120 BTU/hr)	1 gal	H: 8 in (203 mm)	29 lb (13 kg)
	230 VAC, 50/60 Hz	0.65 A (50 Hz), 0.55 A (60 Hz)	1.8 qt/min (1.7 L/min)	1.1 qt/min (1 L/min)	(3.8 L)	W: 7½ in (191 mm) D: 23¾ in (603 mm)	
Coolmate 3	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	3820 W (13,000 BTU/hr) 4.2 gt/min (4.0 L/min)	1420 W (4840 BTU/hr) 1.1 gt/min (1 L/min)	3 gal	H: 13 ¹ / ₄ in (337 mm) W: 12 ¹ / ₄ in (311 mm)	43 lb (20 kg)
	230 VAC, 50/60 Hz	2.5 A (50 Hz), 3.0 A (60 Hz)	4.2 qVIIIII (4.0 L/IIIIII)	1.1 qVIIIII (1 L/IIIIII)	(11.4 L)	D: 23 ¹ / ₄ in (584 mm)	
Coolmate V3	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	3820 W (13,000 BTU/hr) 4.2 qt/min (4.0 L/min)	1420 W (4840 BTU/hr) 1.1 qt/min (1 L/min)	3 gal (11.4 L)	H: 33 in (838 mm) W: 91/4 in (235 mm) D: 91/4 in (235 mm)	54 lb (24 kg)
Coolmate 3.5	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	4140 W (14,000 BTU/hr) 5.0 qt/min (4.7 L/min)	1660 W (5660 BTU/hr) 1.1 qt/min (1 L/min)	3.5 gal (13.2 L)	H: 11 ³ / ₄ in (298 mm) W: 15 ³ / ₄ in (400 mm) D: 26 in (660 mm)	70 lb (32 kg)
Coolmate 4	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	5500 W (18,000 BTU/hr) 5.9 qt/min (5.6 L/min)	1780 W (6070 BTU/hr) 1.1 qt/min (1 L/min)	4 gal (15 L)	H: 16 ¹ / ₄ in (413 mm) W: 15 ¹ / ₄ in (387 mm) D: 18 ³ / ₄ in (476 mm)	40 lb (18 kg)
Coolmate 3X	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	4140 W (14,000 BTU/hr) 5.0 qt/min (4.7 L/min)	1660 W (5660 BTU/hr) 1.1 qt/min (1 L/min)	3 gal (11.4 L)	H: 17 in (432 mm) W: 27 in (686 mm) D: 39 in (991 mm)	158 lb (72 kg)



See also Remote Controls and HF Arc Starters on pages 94 and 95.

Generator Accessories





Adapter Cord, Full KVA #300 517 Field

For Bobcats, Trailblazers, Big Blue 300 Pro, and Big Blue 350 PipePro. NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to common Millermatic and Spectrum 240 V plug.



1-Phase Full KVA Plug Kit #119 172 For Bobcats, Trailblazers, Big Blue 300 Pro, and Big Blue 350 PipePro.

Used to run plasma systems on engine drive generator power.

3-Phase Full KVA Plug Kit #165 963 For Bobcat 3 Phase.

Maintenance



Remote Oil Drain & Filter Kits
Rear Mounted (shown)
#300 106 Field For Kohler
#300 417 Field For Subaru
Oil can be drained from the rear of
the machine.

Front/Chassis Truck Mounted #300 236 Field For Kohler #300 418 Field For Subaru Oil can be drained from the front of the

Oil can be drained from the front of the machine or below the truck, mounted on the chassis.

For Gas Bobcats and Trailblazers. Makes servicing easy when mounted in tight spots.

Package Expansions



Cable Holder #043 946 For Big 40, Big Blue 400 and 500, Big Blue Air Pak, and Big Blue Turbo.



Gas Cylinder Mounting Assembly #195 330

For Gas/Diesel Bobcats and Trailblazers (except Air Pak model). Designed for use with the All-Purpose Running Gears (see note below), Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain.

Note: Not recommended for diesel models when equipped with All-Purpose Running Gear. Cannot be used with LP Tank Mounting Assembly or All-Terrain Running Gears.



LP Tank Mounting Assembly with Hose #195 329

For LP Bobcats and Trailblazers.

Designed for use with the All-Purpose Running Gears, Protective Cage, or by itself. Includes bracket and clamp to mount 33 and 43 lb tanks horizontally, and hose with fittings to converter.

Note: Cannot be used with Gas Cylinder Mounting Assembly or All-Terrain Running Gears.

Portability

See also Trailers on page 91.



All-Purpose Running Gear
#300 396 With inner tubes
#300 477 With Never Flat™ tires
For Gas/LP Bobcats and Trailblazers
(except Air Pak model). Includes two
heavy-duty 15 in tires, two 8 in swivel
casters and a heavy-duty handle.
Recommended for all surfaces and
applications and is easy to move
around the jobsite.

All-Purpose Running Gear with Protective Cage

#300 428 With inner tubes
#300 478 With Never Flat™ tires
For Gas/LP Bobcats and Trailblazers
(except Air Pak model). Running gear
and rugged cage with cable holders
protects your investment and is easy
to move around flat surfaces.

All-Terrain Running Gear EZ
#300 572 With inner tubes
#300 574 With Never Flat™ tires
For Gas Bobcats and Trailblazers
(except Air Pak model). Includes
two heavy-duty 15 in tires, two
10 in pneumatic tires with innertubes
and a rugged handle to provide
maximum maneuverability.

Note: Not for use with Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.



All-Terrain Running Gear EZ with Protective Cage

#300 573 With inner tubes
#300 575 With Never Flat™ tires
For Gas Bobcats and Trailblazers
(except Air Pak model). Running gear
and rugged cage with cable holders
protects your investment and is easy
to move around the jobsite.

Note: Not for use with Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.



Lifting Eye #195 353 For Blue Stars.



No. 38 Hand Running Gear #195 352 For Blue Stars.

Compact and balanced, lightweight wheelbarrow-style running gear designed for easy onsite mobility.



Wildcat 200 Running Gear #300 532

For Wildcat 200. Running gear designed for excellent portability on the jobsite.

Protection



Protective Covers

#195 193 For Blue Stars.

#300 496 For Wildcat 200.

#195 333 For Bobcats, and Trailblazer 302 and 275 DC (Gas) without Protective Cage or Running Gear.

#195 529 For Bobcats, and Trailblazer 302 and 275 DC (Gas) with Running Gear.

#195 334 For Bobcat 250 Diesel and Trailblazer 302 Diesel without Protective Cage or Running Gear.

#300 379 For Trailblazer 302 Air Pak.

#195 301 For Big Blue 300 Pro, 350 PipePro, and 400 Eco Pro.

#194 683 For Big 40, and Big Blue 400 and 500.

#195 159 For Big Blue Air Pak and Big Blue Turbo.

Heavy-duty, water- and mildew-resistant covers protect and maintain the finish of welders. See MIG, Plasma Cutter, and TIG Accessories for additional covers.



Protective Cage with Cable Holders #195 331 For Gas/LP models #300 052 For Diesel models

#300 473 For Trailblazer 302 Air Pak For Bobcats and Trailblazers. Rugged cage with cable holders protects your investment. Works with Running Gear, Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.



Vandalism Lockout Kit #195 118 Field For Big 40, Big Blue 400 and 500, Big Blue Air Pak, and Big Blue Turbo. Lockable hinged steel panels cover

and protect name plate gauges and ignition switch (padlock included). Also includes engine compartment door lock and key.

Trailers

See Literature No. AY/20.0







4 West Four-Wheel Steerable Off-Road Trailer #042 801 For Big 40, Miller Du-Op, and Big

Blues. Heavy-duty 2570 lb (1166 kg) capacity trailer designed for use in mines, quarries, and other rough terrain. Has narrow 22 ft (6.7 m) turning radius. Includes 3 in lunette eye, universal hitch and safety chains.

HWY-224 Trailer #043 805 OFR-224 Trailer #043 802

For Bobcats, Trailblazers, Big 40, Miller Du-Op, and Big Blues. A 2650 lb (1202 kg) capacity trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, and 2 in (50 mm) ball hitch. HWY-224 also includes fenders and lights.

Trailer Accessories



Dual Hitch #300 831 For HWY-1000, HWY-224, and OFR-224. Combination 2 in (50 mm) ball and 3 in (76 mm) lunette eye in one reversible assembly.

Cable Tree #195 023 For HWY-1000. #043 826 For HWY-224 and OFR-224. Provides an area to conveniently wrap weld cables and extension cords.

Fender Kit #300 160 For HWY-224 and OFR-224. Add fenders to OFR-224 or replacement fenders for HWY-224.

Note: Trailers are shipped unassembled. *Width at outside of fenders. **Does not include tongue.

Model	Gross Axle Weight Rating	Gross Vehicle Weight Rating	Net Payload	Height of Bed	Road Clearance	Track (Center to Center of tires)	Standard Tires (Standard Rating or P-size Rating)	Dimensions	Net Weight
HWY-1000	1500 lb (680 kg)	1265 lb (574 kg)	1000 lb (454 kg)	18½ in (470 mm)	6½ in (165 mm)	50 in (1270 mm)	4.8-12	L: 98 in (2489 mm) W: 57½ in (1460 mm)*	265 lb (120 kg)
4 West	2000 lb/axle (907 kg/axle)	3000 lb (1361 kg)	2570 lb (1166 kg)	211/4 in (540 mm)	8 in (203 mm)	551/4 in (1403 mm)	B78-13	L: 91 in (2311 mm)** W: 611/4 in (1556 mm)	430 lb (195 kg)
HWY-224 OFR-224	3500 lb (1588 kg)	2960 lb (1343 kg)	2650 lb (1202 kg)	18½ in (470 mm)	7½ in (191 mm)	52 in (1321 mm)	B-78-13	L: 105 in (2667 mm) W: HWY- 59½ in (1511 mm)* OFR-587/16 in (1484 mm)	320 lb (145 kg)

Load Banks



LBP-350 #043 329

Designed to provide an adjustable load for troubleshooting or calibrating welding power sources or generators. Standard equipment includes analog meters for both AC and DC output with jacks for external metering connections. It comes with a 13 ft (4 m) 115 V power cord and has seven 50 amp load switches, providing a maximum capacity of 350 amps.



Welding Power **Load Bank** #902 804

Designed to load test the output of transformertype, engine- or motor-driven generator

welding power sources. This unit can be used to test AC or DC welder outputs, and to demonstrate welding equipment to prospective customers.

Meters



Digi-Meter #041 656

Used to monitor welding voltage and amperage of constant voltage and constant current arc welding power sources, and engine-driven welding generators. This unit is not designed to measure primary voltage and amperage.

Digital Meters

#043 812 Field For Gold Star models AFTER serial #KG283595. Easy-toinstall, front-panel-mount, digital amp and volt meters.

Digital Weld Meters Kit #195 289 Field

For Big Blue 400 Eco Pro.

Meter Kits #300 331 Field

For SuitCase X-TREME 8VS. #195 165 Field For SuitCase 8RC models BEFORE serial #LJ020185V. #300 178 Field For SuitCase 12RC.

Weld Ammeter and Voltmeter Kit #195 131 Field For Big 40, Big Blue 400 and 500, and Big Blue Air Pak. Panel-mounted analog meters monitor welding output.

MIG Accessories

Accessory Kits



Consists of Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.

Industrial MIG 4/0 Kit with Dinse Connector #300 405

Same as above except weld and work cables have Dinse connector on one end instead of lug.



Shopmate 300 MIG Kit #300 150 Includes Smith® Ar/CO2 regulator with flowtube, 10 ft (3 m) gas hose, 10 ft (3 m) 1/0 interconnecting cable, 15 ft (4.6 m) 1/0 work cable with clamp, and consumable storage box.

Protective Covers



#195 149 For Millermatic 140 Auto-Set. 180 Auto-Set. and 211 Auto-Set with MVP.



For Millermatic 212 Auto-Set. 252 and 350P. Features side pocket.

Pulsing Control



Ontima™ MIG Pulse Control #043 389 For Invisions and XMTs (except MPa and VS models). A multipurpose, microprocessorbased pulse control for synergic MIG

(wire welding or GMAW), manual MIG pulsing or standard MIG welding. Use this control with all above power sources and any Miller wire feeder, including automatic feeders and spool guns. Includes 25 ft (7.6 m) cord with 14-pin plug.





*Rated duty cycle for MIGmatic and Roughneck guns using CO2 gas. Please see individual Literature Sheets for detailed specifications

Model	Part Number	Cable Length	Process	Rated Output	Rated Duty Cycle*	Standard Wire Size	Max. Recommended Wire Size
MIGmatic™ M-Series guns are an ideal	match for Miller i	ntegrated MIG pack	ages and other Mille	r wire feeders. See	Literature No. AY/15.0		
M-100	#248 282	10 ft (3 m)	MIG, Flux Cored	100 Amps	100%	.030035 in (0.8-0.9 mm)	.045 in (1.2 mm)
M-150	#249 039	10 ft (3 m)	MIG, Flux Cored	150 Amps	100%	.030035 in (0.8-0.9 mm)	.045 in (1.2 mm)
	#249 040	12 ft (3.7 m)					
	#249 041	15 ft (4.6 m)					
M-25	#169 594	10 ft (3 m)	MIG, Flux Cored	250 Amps	100%	.030035 in (0.8-0.9 mm)	3/64 in (1.2 mm)
	#169 596	12 ft (3.7 m)					
	#169 598	15 ft (4.6 m)					
	#169 599	15 ft (4.6 m)				.035045 in (0.9-1.2 mm)	3/64 in (1.2 mm)
Roughneck® C-Series guns are fully co	mpatible with all o	urrent Miller wire	feeders and are also	adaptable to other	major brands of welding	equipment. See Literature No. <i>I</i>	AY/17.0
C-3010	#194 751	10 ft (3 m)	MIG, Flux Cored	300 Amps	100%	.035045 in (0.9-1.2 mm)	5/64 in (2.0 mm)
C-3012	#194 752	12 ft (3.7 m)					
C-3015	#194 753	15 ft (4.6 m)					
C-4010	#194 754	10 ft (3 m)	MIG, Flux Cored	400 Amps	100%	.035045 in (0.9-1.2 mm)	5/64 in (2.0 mm)
C-4012	#194 755	12 ft (3.7 m)					
C-4015	#194 756	15 ft (4.6 m)					
C-5010	#194 757	10 ft (3 m)	MIG, Flux Cored	500 Amps	100%	.052-1/16 in (1.3-1.6 mm)	1/8 in (3.2 mm)
C-5012	#194 758	12 ft (3.7 m)					
C-5015	#194 759	15 ft (4.6 m)					
Ironmate™ Series guns are ideal for fe	eding self-shielded	l (gasless) flux core	ed wires with portable	e as well as standa	rd-type wire feeders. Se	e Literature AY/16.0	
FC-1260	#195 732	10 ft (3 m)	Self-Shielded Flux Cored	350 Amps	60%	1/16-3/32 in (1.6-2.4 mm)	3/32 in (2.4 mm)
	#195 729	15 ft (4.6 m)					
FC-1260LM	#194 912	10 ft (3 m)					
(For Lincoln and Miller Wire Feeders)	#194 911	15 ft (4.6 m)					
FC-1150	#194 864	10 ft (3 m)	Self-Shielded	450 Amps	60%	3/32-1/8 in (2.4-3.2 mm)	1/8 in (3.2 mm)
	#194 863	15 ft (4.6 m)	Flux Cored				
Daynayd® O Constit and Dove Flooring							

Bernard® Q-Guns™ and Dura-Flux™ guns — see Web site at bernardwelds.com

Tregaskiss™ TOUGH GUN™ Semi-Automatic MIG Torches — see Web site at tregaskiss.com/semiauto

MIG Gun Accessories

MIGmatic M-Series

Consumable Kits

For M-100 and M-150.

#234 607 .023 wire

#234 608 .030 wire

#234 609 .035 wire

For M-25.

#234 610 .030 wire

#234 611 .035 wire

#234 612 .045 wire

Contains contact tips, tip adapters, nozzle adapters and a standard nozzle.

Roughneck C-Series

Aluminum Conversion Kit #202 895 Allows 10 ft Roughneck guns to feed 3/64-1/16 in aluminum wires.

Consumable Kit #206 073

Contains contact tips, diffuser, nozzle, nozzle insulator and gun hook.

Gun Hook #199 662

Enables Roughneck gun to be stored between welds.

Locking Trigger Switch #199 661 Allows Roughneck trigger to be locked during long welds.

Machine Adapter Kits

#199 663 For older Hobart and Thermal products.

#199 664 For Lincoln products. Adapts Roughneck guns to be used with listed products.

Ironmate Series

.045 Conversion Kit #199 178 Allows FC-1260 and FC-1260LM guns to feed .045 in self-shielded wire.

Bernard

Aluminum Gun Kits

#300 541 .035, 10 ft (3 m)

#300 542 .047, 12 ft (3.7 m)

#300 543 1/16, 12 ft (3.7 m)

10 or 12 ft Bernard® Q-Gun.™

For Axcess Systems and 70 Series. These aluminum gun kits have components designed specifically for pushing aluminum wire. Includes U-grooved .035, .047 or 1/16 in drive rolls, plastic guides, specific aluminum consumables, and a







ACCESSORIES

Plasma Cutter Accessories

Cable Covers





No. 30B Economy Cart with Cord Wrap #300 511

For Spectrum 125C, 375, 875, and 875 Auto-Line. This economical running gear includes a cord wrap and provides mobility with an angle for easy front panel access and extra storage space.

Cutting Guides



Plasma Circle-Cutting Guides #195 981

For ICE-12C, 27C, 27T, 40T, and 60T. Cut straight lines or circles up to 12 in diameter.



Plasma Standoff Roller Guide #194 883

Helps maintain recommended standoff distance to maximize cutting performance and improve tip life.



Suction/Magnetic Pivot Base #195 979

Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 30 in diameter.

Filters



In-Line Air Filter Kit #228 926

For Spectrum 375, 375 X-TREME, 625 X-TREME, 875, and 875 Auto-Line. Mounts to the back of the plasma cutter. Includes male and female 1/4 in NPT

quick-disconnect fittings and hose for easy on/off connection. The replaceable filter element **(#228 928)** filters to .85 microns for removal of 99.9% of water, dirt and oil.



RTI Filter and Bracket #300 491

For Spectrum 375, 875, and 875 Auto-Line. Dryer will remove water, dirt and oil as small as one micron with 99.9% efficiency. Can be mounted on plasma cutter or on wall.

Install as close as possible to point of air consumption. Replaceable filter element (#212 771).

Plugs and Cords



MVP™ Adapter Plugs

#219 258

For power cable 6-50P (230 V/50 A).



#219 261

For power cable 5-15P (115 V/15 A).



#219 259

For power cable 5-20P (115 V/20 A).

For Spectrum 375 X-TREME, Millermatic 211 Auto-Set with MVP, Millermatic Passport Plus, Maxstar 150 models, and Diversion 180. Allows connection of machine to 115- or 230-volt receptacles without tools—just choose the plug that fits the receptacle.



Female Receptacle

Adapter Cord, Full KVA #300 517 Field

NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to common Millermatic and Spectrum 240 V plug.

Protective Covers



#195 144 For Spectrum 125C and 375. **#300 388** For Spectrum 875.



#300 184 X-CASE for Spectrum 375 X-TREME and 625 X-TREME, and Maxstar 150 models.

Torches

See your Miller distributor for complete information on the following ICE plasma torches and their consumables:



ICE-12C Hand-Held For Spectrum 125C.

ICE-27C Hand-Held For Spectrum 375.

ICE-27T Hand-Held For Spectrum 375 X-TREME.

ICE-40T Hand-Held

For Spectrum 625 X-TREME.

ICE-60T Hand-Held

For Spectrum 875 and 875 Auto-Line.

ICE-60TM Machine-Held

For Spectrum 875 Auto-Line.

ICE-60TM Machine-Held Torch Package

#300 759 25 ft (7.6 m) **#300 760** 50 ft (15.2 m)

For Spectrum 875 Auto-Line.
Package includes ICE-60TM machine-held torch, remote control cable (#220 240), remote voltage sense cable (#246 285), machine torch sense tab (#226 763), remote pendant control (#195 513) and internal control harness (#246 287).



Plasma Torch Consumable Kits

#222 938 For ICE-12C.

#222 939 For ICE-27C and 27T.

#222 940 For ICE-40C and 40T. **#239 086** For ICE-60T.

#127 493 Empty consumable box.

Polarity Switches/Controls

Polarity Control #042 871

This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

AC/DC Polarity Reversing Switch Kit #195 095 Field

For Big 40. Changes DC+/AC/DC-without using tools.

DC Polarity Reversing Switch Kit #043 942 Field

For Big 40, and Big Blue 400 and 500. Changes DC polarity without using tools.



Process Selector Control #042 872
For CC, CV or CC/CV welding power
source. Provides easy way to change
welding process. Also includes
features of Polarity Control.

ACCESSORIES

Remote Controls

See also TIG Accessories Remote Controls on page 95.



PRHC-14 Hand Control #195 511 For all solid-state power sources after serial number JK674521. Complete

current or voltage control brings 120 volts GFCI power to work area in a single cord. Housed in a durable light aluminum case and includes 125 ft (38 m) cord with plugs.

Remote On/Off Control #242 197 025

For Deltawelds, Gold Stars, and Dimensions. Allows you to turn your power source on or off from a distance of 25 ft (7.6 m). This is especially useful if power source is up in a mezzanine.



#242 210 020 20 ft (6 m) cord #242 210 100 100 ft (30 m) cord For Dialarc 250 AC/DC, SRH-444, and Mark VIII-2. Optional remote control facilities RF-10 (#041 111) required for the Dialarc 250 AC/DC. Includes cord and plug.

*Custom lengths available in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.



For Big 40 CC, and Big Blue 400 CC and 500 CC. Remote hand amperage control. Includes 20 ft (6 m) cord and plug.

Spot Welder Gyro Bail



Shown with MSW spot welder.

Gyro Bail #041 979
For MSW and LMSW air-cooled spot welders. Supports weight of welder.
Operates with boom and counter-

Spot welds in any position.

weight or from spring-loaded cable.

Stick Accessory Kits



No. 2 Stick Cable Sets #195 196 15 ft #300 836 50 ft

Consists of either 15 or 50 ft electrode cable with holder and work cable with clamp. 200 A, 100% duty cycle.

2/0 Stick Cable Set (50 ft) #173 851 Consists of 50 ft 2/0 electrode cable with holder and 50 ft work cable with clamp. 350 A, 100% duty cycle.

2/0 Stick Cable Set (100/50 ft) #043 952

Consists of 100 ft 2/0 electrode cable with holder and 50 ft work cable with clamp. 300 A, 100% duty cycle.





Weld Cables #195 457 Cable w/Electrode Holder #195 458 Cable w/Work Clamp Consists of a stud/Tweco® adapter and 10 ft 2/0 weld cable with a Tweco male connector and either an electrode holder or work clamp. Rated up to 400 A.



2/0 Weld Cable Extensions #195 456 50 ft **#195 455** 100 ft
For use with weld cables **(#195 457)**and **(#195 458)**.

Sub Arc Accessories

Consumables Handling



Flux Hopper with Valve #194 775 25 lb (11 kg) capacity hopper with automatic flux valve and slag screen. Contact the following suppliers for Miller-compatible flux recovery systems.

Flux Recovery Systems

American Vacuum 1-800-321-2849 Invincible 1-800-282-6999 Weld Engineering 1-508-839-9875

Wire Reel #108 008

For 60 lb (27 kg) coil of wire. Requires Spool Support Assembly **(#119 438)**.

Wire Straightener #199 733

For RAD-400 or RAD-780 wire drive assembly. For wires 1/16 – 7/32 in (1.6 – 5.6 mm).

Control Accessories

Basic Cable Kit #195 308

For digital and analog HDC 1500 controllers. Includes 30 ft (9 m) 14-pin interconnect cable and 10 ft (3 m) motor cable.

Control Cable Extensions*

#242 205 025 25 ft (7.6 m)

#242 205 050 50 ft (15 m)

#242 205 080 80 ft (24.4 m) 14-pin welding power source control cable extends distance between power

source and controller.

*Custom lengths available in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.

Motor Extension Cable #195 342 25 ft (7.6 m) extension for the motor cable supplied in kit (#195 308).

Light-Duty Cross Slide #195 411
Allows 6 inches of travel adjustment.
Two units can be stacked to provide vertical and horizontal movement.
Not recommended for tandem.

Heavy-Duty Cross Slide #300 482

Allows for 6 inches of travel adjustment and has a load capacity of 200 pounds. Recommended for tandem.

Drive Assembly Drive Rolls

V-knurled drive rolls for use with hard-shelled cored wires.

SAW4 Recommended Drive Rolls

#132 955 1/16 in (1.6 mm)

#132 960 5/64 in (2.0 mm)

#132 961 3/32 in (2.4 mm) **#132 962** 7/64 in (2.8 mm)

RAD-400 Recommended Drive Rolls

#132 963 1/8 in (3.2 mm)

#193 700 5/32 in (4.0 mm)

RAD-780 Recommended Drive Rolls

#193 701 3/16 in (4.8 mm)

#193 702 7/32 in (5.6 mm)

Torch Accessories and Tips

OBT 600 Torch Body Extensions

#043 967 1 inch

#043 969 2 inch

#043 973 4 inch

#043 975 6 inch

OBT 1200 Torch Body Extension #043 981

Overall length with extension is 9 inches. Actual length of extension is 8-1/2 inches.

Torch Contact Tips

OBT 600	OBT 1200	Wire Size
#192 700	#192 141	1/16 in (1.6 mm)
#192 701	#199 026	5/64 in (2.0 mm)
#192 702	#192 142	3/32 in (2.4 mm)
#192 703	#200 771	7/64 in (2.8 mm)
#192 704	#192 143	1/8 in (3.2 mm)
#192 705	#192 144	5/32 in (4.0 mm)
#192 706	#192 136	3/16 in (4.8 mm)
#192 707	#200 756	7/32 in (5.6 mm)

Welding Carriages

Submerged Arc welding systems employ two primary ways of traversing the arc, wire and flux along the joint to be fused: a Motorized Side Beam or a Self-Propelled Tractor Package. Side beam systems generally work well for longitudinal welds less than eight feet long. Welds over eight feet are better suited to tractor systems.

Motorized Side Beam Systems

For more information contact Jetline Engineering at (949) 951-1515. They have extensive experience assembling custom mechanized welding systems—including Sub Arc systems.



Miller Tractor Packages

MT 1500 DX (with HDC 1500 DX Automatic Weld Control) #951 060 MT 1500 A (with HDC 1500 A Automatic Weld Control) #951 061 Miller self-propelled tractor packages include an HDC 1500 DX (digital) or 1500 A (analog) automatic weld control, a travel system complete with a main

a travel system complete with a main mounting mast and handle assembly, a mounting arm for one wire reel, vertical and horizontal 4 x 4 inch cross slides, a control support arm and an adjustable guide roll arm. See Literature No.DC/19.9 for more information.

TIG Accessories

High-Frequency Arc Starters and Stabilizers



High Frequency Arc Starter/Stabilizer HF-251D-1 #042 388 115 VAC HF-251-2 #042 387 230 VAC

These portable 250 A, 60% duty cycle units add high-frequency to the welding circuit to help start arc when using the TIG process.

Secondary Contactor Kit #041 969 Field For HF-251D-1. #041 906 Field For HF-251-2. For power sources without a contactor. Mounts inside HF-251 cabinet.

Kits



#195 054 kit shown.

Contractor Kits

#195 055 150 A TIG/Stick Package with RCCS-14 Fingertip

#195 054 150 A TIG/Stick Package with RFCS-14 HD Foot Pedal

For Maxstar 200 SD and DX, and Dynasty 200 SD and DX. Kit is an all-in-one welding package and comes complete with either a RCCS-14 fingertip control or RFCS-14 HD foot control plus protective carrying case, Weldcraft® 150 A TIG torch, International-style torch adapter, 200 A Stick electrode holder with 15 ft (4.6 m) cable, 300 A work clamp with 15 ft (4.6 m) cable, Smith® flow gauge regulator with 12 ft (3.7 m) gas hose, gas hose coupler, and AK-2 torch accessory kit.



Weldcraft® Water-Cooled Torch Kits #300 185 250 A, WP20

#300 183 300 A, CS310 **#300 186** 400 A, WP18SC

For Maxstar and Dynasty 200/350/700, and Syncrowave 250 DX/350 LX.
Each torch kit includes a 25 ft (7.6 m) TIG torch, torch cable cover, work clamp with 15 ft (4.6 m) cable [12 ft (3.7 m) cable on 400 A kit], Smith® regulator/flowmeter with 12 ft (3.7 m) gas hose, torch adapter, and torch accessory kit. See Lit. No. AD.5.0 for complete individual package details.

Modules

Pulser Module #300 548

For Syncrowave 250 DX effective with serial #LE282983. For welding thin materials. Provides a heating and cooling effect of the weld puddle to reduce heat input and control distortion of the material. Provides 0.25 to 10 pulses per second.

Sequencer Module #300 547
For Syncrowave 250 DX and 350 LX
effective with serial #LE282983.
Provides a starting current higher
or lower than the welding current.
Provides final slope and final current
for trailing the weld. Provides a spot
timer for TIG spot application.

Protective Covers



#300 579 and #195 478 covers shown.

#195 321 For Maxstar 200 Series. #195 322 For Dynasty 200 Series. #300 059 For Syncrowave 200. #195 320 For Syncrowave 250 DX/350 LX.

#300 579 For Diversion 165 and 180. **#195 478** For XMT 304 and 350.

Remote Controls



RCC-14 (14-pin plug) #151 086
For all Miller solid-state power sources
AFTER serial number JK674521.
Side-to-side (east/west) rotary-motion
fingertip current/contactor control
fastens to TIG torch using two Velcro®
straps. Great for production or
contractors that need quick ramp-up.
Includes 26.5 ft (8 m) cord and plug.



RCCS-14 (14-pin plug) #043 688 26.5 ft (8 m) cord For all Miller solid-state power sources AFTER serial number JK674521.

RCCS-6M (6-pin plug) **#195 184** 13.25 ft (4 m) cord **#195 503** 26.5 ft (8 m) cord For Maxstar 150 STL and STH.

North/south rotary-motion fingertip current/contactor control fastens to TIG torch using two Velcro® straps. Great for applications that require a finer amperage control. Includes cord and plug.



RFC-23A #242 199 020

For Dialarc 250 AC/DC, Dialarc HF, Gold Star 330 A/BP and 320 A/BP. Foot pedal current/contactor control. Includes 20 ft (6 m) cords and plugs.



RFCS-14 (14-pin plug) **#043 554** 20 ft (6 m) cord

RFCS-5 (5-pin plug) #043 716 20 ft (6 m) cord For all Miller solid-state power sources BEFORE serial #JK674521.

RFCS-6M (6-pin plug) **#195 183** 13.25 ft (4 m) cord **#195 504** 20 ft (6 m) cord For Maxstar 150 STL and STH.

Foot pedal current/contactor control. Includes cord and plug.



RFCS-14 HD (14-pin plug) **#194 744**

For all Miller solid-state power sources AFTER serial #JK674521. Heavy-duty foot pedal current/ contactor control with increased stability and durability from larger base and heavier cord. Reconfigurable cord can exit front, back or either side of the pedal for flexibility. Includes 20 ft (6 m) cord and plug.

HD Conversion Kit #194 743

Kit provides the needed hardware to convert your existing RFCS-14 foot control to the heavy-duty version.

Adapter Cord for RJ45 to 14-Pin #300 688

12-inch long adapter cord to allow the Miller 14-pin industrial foot controls to be used with the Diversion 165 and 180.



RFCS-RJ45 #194 744

For Diversion 165 and 180. Foot pedal current/contactor control. Includes 14 ft (4.3 m) cord and plug.



RHC-14* (14-pin plug)
#242 211 020 20 ft (6 m) cord
#242 211 100 100 ft (30.5 m) cord
For all Miller solid-state power
sources AFTER serial #JK674521.
Miniature hand current/contactor
control. Dimensions: 4 x 4 x 3-1/4 in
(102 x 102 x 82 mm). Includes cord
and plug.

*Custom lengths available in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.



RMLS-14 (14-pin plug) #129 337
For all Miller solid-state power sources
AFTER serial #JK674521. Momentaryand maintained-contact rocker switch
for contactor control. Push forward for
maintained contact and backward for
momentary contact. Includes 26.5 ft
(8 m) cord and plug.



RMS-14 (14-pin plug) **#187 208** For all Miller solid-state power sources AFTER serial #JK674521.

RMS-6M (6-pin plug) #195 269 For Maxstar 150 STL and STH.

Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5 ft (8 m) cord and plug.



RPBS-14 (14-pin plug) #300 666
For all Miller solid-state power sources
AFTER serial #JK674521. Attaches to
the TIG torch to remotely start and
stop the TIG welding process.
Includes 25 ft (7.6 m) cord and plug.



Wire Feeder Accessories

Control Detachment Kits

#194 914 10 ft (3 m) #194 913 25 ft (7.6 m) For all S-74S and S-74D feeders, and S-74DX feeders BEFORE serial number LJ440752U.

#300 560 10 ft (3 m) **#300 562** 25 ft (7.6 m) For S-74DX feeders AFTER serial number LJ440752U.

#194 995 25 ft (7.6 m) For all D-74S and D-74D feeders. and D-74DX feeders BEFORE serial number LJ440752U.

#300 561 10 ft (3 m) #300 563 25 ft (7.6 m) For D-74DX feeders AFTER serial number 1.144075211.

Kits allow separation of control module from the wire drive assembly and base.

Extension Cables (14-Pin)

8-Conductor Cables*

#242 208 025 25 ft (7.6 m) #242 208 050 50 ft (15 m)

#242 208 080 80 ft (24.4 m) For XR-S and XR-D Controls, 20 Series feeders, and 70 Series (S/D/DX model)

feeders. For 14-pin remote controls/ 24 VAC wire feeders. 14-pin plug to a 14-pin socket. (Not for 115 V XR or 50 Series feeders.)

11-Conductor Cables*

#247 831 025 25 ft (7.6 m) **#247 831 050** 50 ft (15 m)

#247 831 080 80 ft (24.4 m)

For XR-AlumaFeed, MPa Plus feeders, and 60M feeders. 11-conductors to support contactor control and remote voltage control on all Miller electronic CV 14-pin power sources. Additional functions supported when using the Invision 352 MPa power source include synergic Pulsed MIG, remote process select and side select capabilities.

14-Conductor Cables*

#242 205 025 25 ft (7.6 m)

#242 205 050 50 ft (15 m) #242 205 080 80 ft (24.4 m)

For HDC and WC-115 weld controls. XR-Controls prior to serial #KK309906, and 50 Series feeders. Fully-loaded 14-pin extension cables for remote controls, and 24 V and 115 V feeders.

*Custom lengths available in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.

Extension Hose and Cable Kits

Spoolmatic 15A/30A Extension Hose and Cable Kits

#132 228 25 ft (7.6 m) #132 229 50 ft (15 m)

Extends leads, etc. between Spoolmatic gun and power source.

Power Supply Adapters

Millermatic PSA Control #195 019 Required when using 24 VAC wire feeder or XR-Control and gun with Millermatic 252.



PSA-2 Control #141 604

Required when using SuitCase 8RC and 12RC, 22A and 24A, and 70 Series wire feeders with power sources having only 115 VAC available. Control can be mounted on wire feeder or positioned at power source and is equipped with a 14-pin receptacle for direct connection of wire feeder control cord. A short cord with a 4-pin plug is hard wired to the control. A 10 ft (3 m) interconnecting cord with a 4-pin for connection to PSA-2 and Hubbell connectors for older-style Miller CV power sources is included. Control can also be used with competitive power sources requiring a contact closure for contactor control. See below for PSA-2 Extension Cord.

PSA-2 Extension Cord #047 813 25 ft (7.6 m) cord used to extend the 10 ft (3 m) cord supplied with the PSA-2 control (4-pin to 4-pin connection).

Secondary Contactor

External Secondary Contactor #108 921

For S-32S and S-32SL feeders. The 115 VAC/12 VDC secondary contactor, rated at 250 amps, 60% duty cycle, is designed for use with welding power sources not having an output contactor. It allows welding wire to be electrically cold until operator is ready to weld. The contactor can be used with DC power sources operating with electrode positive or negative. Contactor will operate off 115 VAC or can be connected to 12 VDC battery of an engine driven welder without 115 VAC auxiliary power available. Gun trigger switch controls contactor and must remain closed while welding. Note: 25 ft Remote Contactor Cord (#108 925) required.

Spool Adapter

For use with 14 lb (6.4 kg) spool of Hobart or Lincoln self-shielding wire.

Spool Gun Controls

For more information see Lit. No. M/1.73.



WC-24 Weld Control #137 549

Packaged in a compact and lightweight nonmetallic enclosure. the WC-24 easily mounts on the

power source. Designed for use with Miller CV power sources supplying 24 VAC and 14-pin receptacles, the control includes a board-mounted potentiometer which can alter the drive motor acceleration rate to optimize arc starting performance.



WC-115A Weld Control #137 546 Without contactor #137 546-01-1 With contactor

Operates on 115 VAC, and designed primarily for CC DC power sources. Can also be used with CV power sources or DC engine drives supplying 115 VAC. Used with a CC source, the control circuit functions in a voltagesensing mode and with a CV source, it functions as a constant-speed circuit. Includes wire run-in and drive motor acceleration controls which ensure optimum arc starting performance.

WC-115 Contactor Kit #137 548 Field

Recommended for Spoolmatic gun and WC-115A control when using power sources without weld output contactor. (This is installed in the WC-115A.)

Spoolmate 3035 Spool Gun

For more information see Lit. No. M/1.5.



Spoolmate 3035 #195 016

This reliable, yet economical light industrial spool gun provides 20 ft cable reach and accessibility, with smooth feeding of aluminum wire. Lightweight (9.1 lb) and well-balanced for operator comfort the 3035 is rated at 150 amps at 60% duty cycle. It handles aluminum, steel and stainless wire from .023 - .035 in (0.6 - 0.9 mm) with a wire speed of 115-715 IPM. Includes cable sheath, spring strain relief, clear spool canister and easyto-remove barrel assembly.

Spoolmate 3035 Heavy-Duty Barrel #195 375

Ideal for demanding applications. Rated at 200 A, 60% duty cycle.

Spoolmate 3035 Extension Kit #194 996 25 ft (7.6 m)

Extends hose and cables between Spoolmate gun and power source.

Gas Valve/Trigger Receptacle Kit #300 338

Required to connect Spoolmate 3035 to Millermatic DVI2.



SGA 100 #043 856

Required to connect Spoolmate 3035 spool gun to any Millermatic 140, 180, or 211. Also allows connection to virtually any similar MIG welder-Miller or other brands. Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.



SGA 100C #043 857

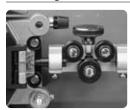
SGA with contactor required to connect Spoolmate 3035 spool gun to CV engine drives like Miller's Bobcat. Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.

Turntable Assembly

#146 236

Allows feeder to rotate as operator changes work position. Reduces strain and bending of gun cable.

Wire Straightener



For 20 Series and 70 Series.

#141 580

For .035 - .045 in (0.9 - 1.1 mm) wire.

For 1/16-1/8 in (1.6-3.2 mm) wire.



RECOMMENDED BRANDS

COUNTLESS CAPABILITIES. EXPERT ADVICE. INTEGRATED OFFERINGS.

Get More Choices and Improve Your Welding Productivity with ITW Brands

Miller and the businesses of ITW Welding work together to provide premium performance delivered through a breadth of solutions encompassing welding, cutting, consumables, and accessories.

Together, we're creating systematic value: serving more industries, applications and end-users, in more global locations than ever before. These ITW businesses, owned by Illinois Tool Works Inc., share a common passion for excellence through innovation, customer service and reliability.

Illinois Tool Works Inc. (NYSE: ITW), has \$13.9 billion in 2009 revenues, and is a multinational manufacturer of a diversified range of value-adding and short lead time industrial products and equipment. Headquartered in Glenview, Illinois, the company consists of nearly 800 business units in 57 countries and employs approximately 59,000 people.



Contact Us: Pho

Phone: 1-800-757-8301 Web: tempil.com

Tempil incorporates state of the art temperature indicator technology to develop a wide range of temperature measurement products which include temperature indicators, temperature strips, temperature labels, temperature dots, and sterilization inks. These products are produced in a wide range of configurations to meet the needs of applications requiring accurate temperature measurement and temperature control.



Contact Us:

Phone: 1-847-657-5300 Web: magnaflux.com

MAGNAFLUX is a leading worldwide supplier of magnetic particle, and dye penetrant inspection equipment and associated chemical products used for nondestructive testing.



Contact Us:

Phone: 1-949-951-1515 Web: jetline.com

Jetline is your partner in welding automation, and is a leading supplier of automated welding systems and components. Jetline applies proven experience and innovative solutions to automated welding, and helps manufacturing companies around the world to improve product quality and increase productivity.



Contact Us:

Phone: 1-800-332-9448 or 937-332-5000

Web: welding.org

Provides skill and technical training to career-oriented students and industry alike. The Institute is also the place to turn for books, DVDs, and other resources related to welding training.

See the following pages for more information on:













MILLER RECOMMENDED BRANDS

GET TOUGH WITH YOUR BOTTOM LINE

Tregaskiss™ is a leading supplier of premium MIG welding guns, peripheral products, welding consumables and accessories. Our tough products consistently last longer, resulting in fewer replacements, reduced downtime, less rework and a better bottom line for our customers.



LIFETIME WARRANTY ON

HANDLES AND SWITCHES-If you break it, we'll replace it free!

2 YEAR
WARRANTY ON
LSR UNICABLES

TOUGH GUN
ThruArm™ Series
featuring Low-Stress
Robotic (LSR) Unicables.
Available for Motoman, ABB,
FANUC, KUKA, OTC and other
through-arm style arc welding robots.

ROBOTIC MIG GUNS AND PERIPHERALS

TOUGH GUN™ Robotic MIG Guns offer the performance and precision required for high-volume production welding. Our TOUGH GUN Robotic Peripherals complement the robotic MIG guns for a durable and fully integrated robotic welding system.

Straight handle design is ergonomic and allows trigger to be mounted on the top or bottom of the handle.

SEMI-AUTOMATIC MIG GUNS

TOUGH GUN Semi-Automatic MIG Guns are known for their rugged durability in high-volume production facilities.

Plus, our unique **Double Life MIG Gun System** doubles the life of your air-cooled gun! Simply swap the trigger and gooseneck from the worn front handle with the power pin on the rear handle.

COMMON CONSUMABLE PLATFORM

Tregaskiss™ MIG Guns share the same high performance consumables so you have less inventory and greater production uptime.



TOUGH LOCK™ CONSUMABLE SYSTEM WITH NEW DUAL TAPER TECHNOLOGY

Learn more about the cooling and locking benefits of our new Dual Taper Technology at Tregaskiss.com/DualTaper



QUICK LOAD™ LINER

Cut your liner replacement time by more than 50% (as compared to conventional liners) by loading your liners from the front! Learn more at Tregaskiss.com/QuickLoad

Contact Us: Canada and U.S.A.

Phone: 1-877-737-3111 Fax: 1-877-737-2111 International Phone: +1-519-737-3000 Fax: +1-519-737-2111

Email: info@tregaskiss.com Web: Tregaskiss.com

MILLER RECOMMENDED BRANDS



The Bernard[®] Difference.

Bernard knows every welding application is different. That's why we engineer MIG and flux-cored products that can be customized for your specific needs. Each of our products is built to improve your welding productivity and performance.



All Guns are Not Created Equal

Exceptional welding performance demands an exceptional gun. Our Q-Gun™ MIG guns help you achieve quality welds, increase productivity and lower costs. Customize your Q-Gun using our online configurator at Bernardwelds.com.

Centerfire Consumables

- Built-in spatter shield protects diffuser, improves gas flow
- Threadless contact tip mates securely with diffuser for better conductivity
- Fits all Q-Guns from 150 to 600 amps

Jump Liner

· Minimizes inventory and downtime for changeover

Neck

 Fixed, rotatable and multiple length options improve operator comfort

Handle

Ventilated to reduce heat and increase operator comfort

Trigger

 Designed and built to last more than 1 million cycles

Centerfire™ Sets the Standard

Bernard developed its Centerfire consumables to save you time and money. Our contact tips, nozzles and diffusers provide better arc starts, less spatter and more consistent welds. Centerfire consumables also last up to three times longer than competitive brands! Plus,

our unique conversion parts allow you to convert most competitive guns to Centerfire consumables, quickly and easily.



A Flux-Cored Gun Built for the Way You Weld

Designed for self-shielded flux-cored welding, the Dura-Flux™ gun is extremely tough, yet comfortable to hold and use.

Handle

 Comfortable handle provides excellent control

Cable

 Heavy-duty steel monocoil cable withstands extreme abuse to provide a smooth, consistent wire feed

Consumables

 Drop-in Centerfire consumables last longer than other brands and change out quickly

Trigger Guard

- Standard small trigger guard improves maneuverability compared to larger heat shields
- · Optional heat shield available

Trigger

 Non-metallic trigger absorbs less heat, reducing operator discomfort

Stay-Tite[™] Technology

All Bernard guns feature long-lasting power cable compression fittings and necks with large tapered gun connections to ensure optimal electrical conductivity and product durability.

Contact Us:

Address:

449 West Corning Road PO Box 667 Beecher, IL 60401 Phone: 708-946-2281 Toll Free: 800-946-2281 Fax: 708-946-6726 Email: info@bernardwelds.com Web: Bernardwelds.com

1

MILLER RECOMMENDED BRANDS

A Tradition of Filler Metal Excellence

HOBART BROTHERS

Hobart Brothers Company is proud to be a leading provider of superior welding filler metals, technical education and customer service for the welding industry. Our goal is, and has always been, to find the right stick electrode and solid or tubular wire to improve your productivity and lower your costs. Plus we promise to respond to your orders quickly to ensure you get the fastest possible delivery of your filler metals.



Our brands meet your needs.

HOBART

Our Hobart® brand features stick electrodes, and solid, flux-cored and metal-cored wires designed for mild and low alloy steel applications. Each feature superior arc performance, and selections are available for fast-freezing or self-peeling slag, low hydrogen weld deposits, high deposition rates and efficiencies, and X-ray quality welds.

ATRI-MARK®

Our premier Tri-Mark® brand of gas-shielded, self-shielded and low alloy flux-cored wires is designed to provide superior welding performance. The same holds true for our mild steel and low alloy metal-cored wires.

All Tri-Mark wires are designed to improve weld quality, speed productivity and offer the best mechanical and chemical properties for the job.

McKAY®

McKay® brand stainless steel and hard surfacing filler metals excel on the most demanding applications.

Stainless steel stick electrodes, spools, tubular wires and cut-lengths provide excellent arc characteristics, while McKay hard surfacing products offer build-up or overlay welds that meet or exceed equipments' impact and abrasion resistance requirements.

Contact Us: Address:

101 Trade Square East Troy, OH 45373 Phone: 937-332-4000 Toll Free: 800-424-1543

Fax: 937-332-5224

 ${\color{red}\textbf{Email:}}\ \textbf{hobart} @ \textbf{hobartbrothers.com}$

Web: Hobartbrothers.com



With newly developed fabrication technology, the MAXAL® brand is producing **aluminum welding wire** recognized around the world as the **new standard in quality**. MAXAL wire produces exceptional weld integrity through maximized feedability and welding consistency, along with minimized welding porosity, smut and discoloration. A wide selection of alloys, sizes and packaging configurations are offered.

Contact Us: Address:

1631 International Drive Traverse City, MI 49686 Phone: 231-933-1234 Fax: 231-933-6110 Email: bfarkas@maxal.com

Web: Maxal.com



The TIG Welder's Choice WELD



Crafter™ Series

Find best-in-class advantages in our Crafter Series:

• Designed for the professional TIG welder. • High-quality, long-lasting components that help reduce replacement costs. Ample cooling capacity to improve productivity on demanding jobs. Maneuverable, easy-to-handle designs that increase operator



Expect the best with the WP Series, including:





At Weldcraft, our top priority is manufacturing the best and most innovative TIG torches and accessories in the industry. Find out more about these premium products, plus our full line of tungsten electrodes at Weldcraft.com

Contact Us:

2741 North Roemer Road Appleton, WI 54911

comfort and arc-on time.

Phone: 920-882-6800 Toll Free: 800-752-7620

Email: customerservice@weldcraft.com Web: Weldcraft.com

Fax: 920-882-6840



Premium Products Built for a Lifetime



Six Reasons to Choose Smith

- 1. Smith's Lifetime Warranty It's the longest and strongest in the business!
- 2. Products Engineered for Safety Our torches feature exclusive technology to help keep you safe.
- 3. Superior Cutting Tip Performance We offer long-lasting cutting tips for even the most challenging jobs.
- 4. Our Complete Product Line

Smith offers a complete line of oxy-fuel cutting, welding, brazing and heating equipment, plus gas regulators.

Our exceptional product quality and warranties offer long-term cost savings!

6. Premium Built

Our products are proudly designed, assembled and tested in Watertown, SD, USA!

Lifetime Warrantv Torches



Gas Regulators

Achieving consistent welding and cutting performance is important in any application. So is finding a durable product that saves money. Smith has engineered its gas regulators with such key benefits in mind.

Our gas regulators feature highquality components that resist corrosion, freezing and clogging to provide accurate gas flow and readings.



Specialty Gas Regulators

Complex applications require comprehensive product lines. Smith's full line of specialty gas regulators has been engineered for general purpose, analytical, high purity and corrosive gases, and feature durable, high-performing and problem-solving designs.

For precise pressure control on even the most critical applications, Smith offers over 10,000 configurations, most of which ship within 24 hours!



Contact Us:

2601 Lockheed Avenue Watertown, SD 57201

Phone: 605-882-3200 Toll Free: 800-843-7912

Fax: 800-685-3370

Email: smith@smithequipment.com Web: Smithequipment.com

Call 1-800-4-A-MILLER for more information. LITERATURE SHEETS/INDEX



Miller Product Literature Sheets

Use this catalog to help compare and select power sources. To obtain detailed product literature sheets visit our Web site at MillerWelds.com, see your Miller distributor or call 1-800-4-A-MILLER. These sheets provide ordering information, control features, options and recommended accessories. They also provide complete specifications, including cCSAus, CE, CCC, IEC, CSA, UL and NEMA listings.

In a hurry? Check our Web site, or upon request, our 800-number operators can also fax the literature directly to you. Simply ask for a literature sheet by product name.

MillerWelds.com and 1-800-4-A-MILLER (1-800-426-4553) are also your direct line to locating your nearest Miller distributor sales Operators are on-duty from 8:30 AM to 5:00 PM (eastern time). At all other times an automated service is





Miller has a long history of being the first to meet the changing needs of welders in a variety of industrial and non-industrial markets.



In 1993 we became the first U.S. welding equipment manufacturer to be registered to the world's highest quality standard — ISO.



To further demonstrate Miller's commitment to its customers, we back all our equipment with the best coverage in the industry the True Blue® Warranty. And that's The Power of Blue®.

Index

New! or Improved! products appear in blue type.

A	AlumaFeed Welding System. 13 Arc Armor Welding Protection. 82 ArcStation (F-Series). 79 ArcStation (S-Series). 79 Auto-Axcess Systems. 22 Automation Components 22 Axcess Systems. 20
В	Big 40 70 Big Blue 300 Pro 67 Big Blue 350 PipePro 68 Big Blue 400 Eco Pro 69 Big Blue 400 70 Big Blue 500 70 Big Blue Air Pak 71 Big Blue Turbo 71 Blue Star Series 59 Bobcat 225 62 Bobcat 250 63 Bobcat 3 Phase 60
C	Coolant Systems 89 CP-302 16 CST 280 36 CST 280 Racks 56
D	Delta-Fab System 16 Deltaweld Series 17 Dialarc 250 AC/DC 34 Dimension NT 450 53 Dimension Series 49 Diversion 165 45 Diversion 180 45 Dynasty 200 Series 42 Dynasty 350 43 Dynasty 700 43

F	FILTAIR 130
G	Gloves 84 Gold Star Series 34
Н	Helmets 82
I	Invision MPa Plus System 18 Invision 456MP/456P 19
J	Jackets/Apparel 84
M	Mark VI 56 Mark VIII-2 56 Maxstar 150 S 35 Maxstar 150 STL/STH 39 Maxstar 200 STR 35 Maxstar 200 Series 40 Maxstar 350 41 Maxstar 700 41 Miller Du-Op 69 Millermatic 140 Auto-Set 8 Millermatic 180 Auto-Set 8 Millermatic 211 Auto-Set w/MVP 9 Millermatic 212 Auto-Set 10 Millermatic 252 11 Millermatic 350P 12 Millermatic Passport Plus 9
	Millermatic Reach Wire Feeder 10
P	PipeWorx Welding System 54
S	70 Series 30 70 Series MPa Plus 31 70 Series Swingarcs 32 Shopmate 300 DX 49 Spectrum 125C 75 Snectrum 375 75

\$	Spectrum 375 X-TREME Spectrum 625 X-TREME Spectrum 875 Spectrum 875 Auto-Line Spoolmate 100 Series Spoolmate 200 Series Spoolmate 3035 Spoolmatic 15A/30A Spot Welders SRH-444 Sub Arc DC 650/1000 SuitCase 8RC SuitCase 12RC	76 77 77 27 27 26 28 72 34 73
	SuitCase X-TREME 8VS SuitCase X-TREME 12VS Syncrowave 200 Syncrowave 250 DX Syncrowave 350 LX	25 25 44 44
T	22A/24A	34 64 64 65
W	Wildcat 200	
X	XMT 304/350 Racks XMT Series XMT WCC XR-Aluma-Pro Gun XR-Aluma-Pro Plus Gun XR-A/XR-W Guns XR-Controls	50 52 29 31 28

CONTENTS



What's New 3

Help Me Choose 4



Power Sources 6
Automated Mfg



MIG (GMAW)

Wire Feed

Feeders 24



TIG (GTAW)
Power Sources 37

Wireless Remotes 46

Multiprocess
Power Sources 48

Multioperator Power Sources **55**

Engine-Driven Welder/Generators 58

Spot Welders 72

Submerged Arc **73**

Plasma Cutters 74

Welding Workstations **78**

Fume Extraction 80

Welding Protection **82**

Accessories

Miller Recommended Brands 97

THE INDUSTRY'S MOST VALUABLE WELDING RESOURCES

MillerWelds.com

In addition to information on our complete line of products, here are just a few ways MillerWelds.com can enrich your welding experience:

■ PRO and DIY eNewsletters

News tailored specifically for the professional and DIY welder.

■ Technical articles and success stories

Ideas and inspiration to improve your welding business.

■ Protect your investment

Register your product at MillerWelds.com/register in case it is lost or stolen.

■ Videos, books, articles and free downloads

Resources to improve your welding and plasma cutting skills.

■ Three discussion forums
Connect with more than 15,000 members.

■ Industries & Interests pages

Content focused on your area of interest or profession.

■ The Project Idea Gallery

More than 1500 photos to spark your imagination.

■ MTE Glossary

A complete listing of Miller Technology Exclusives along with welding terms at MillerWelds.com/dictionary.

■ Get more on your mobile!

Scan tags throughout the catalog for additional product information. See page 2/3.



Distributed By:

