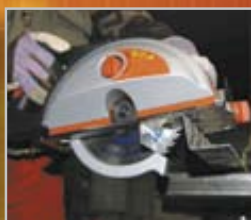
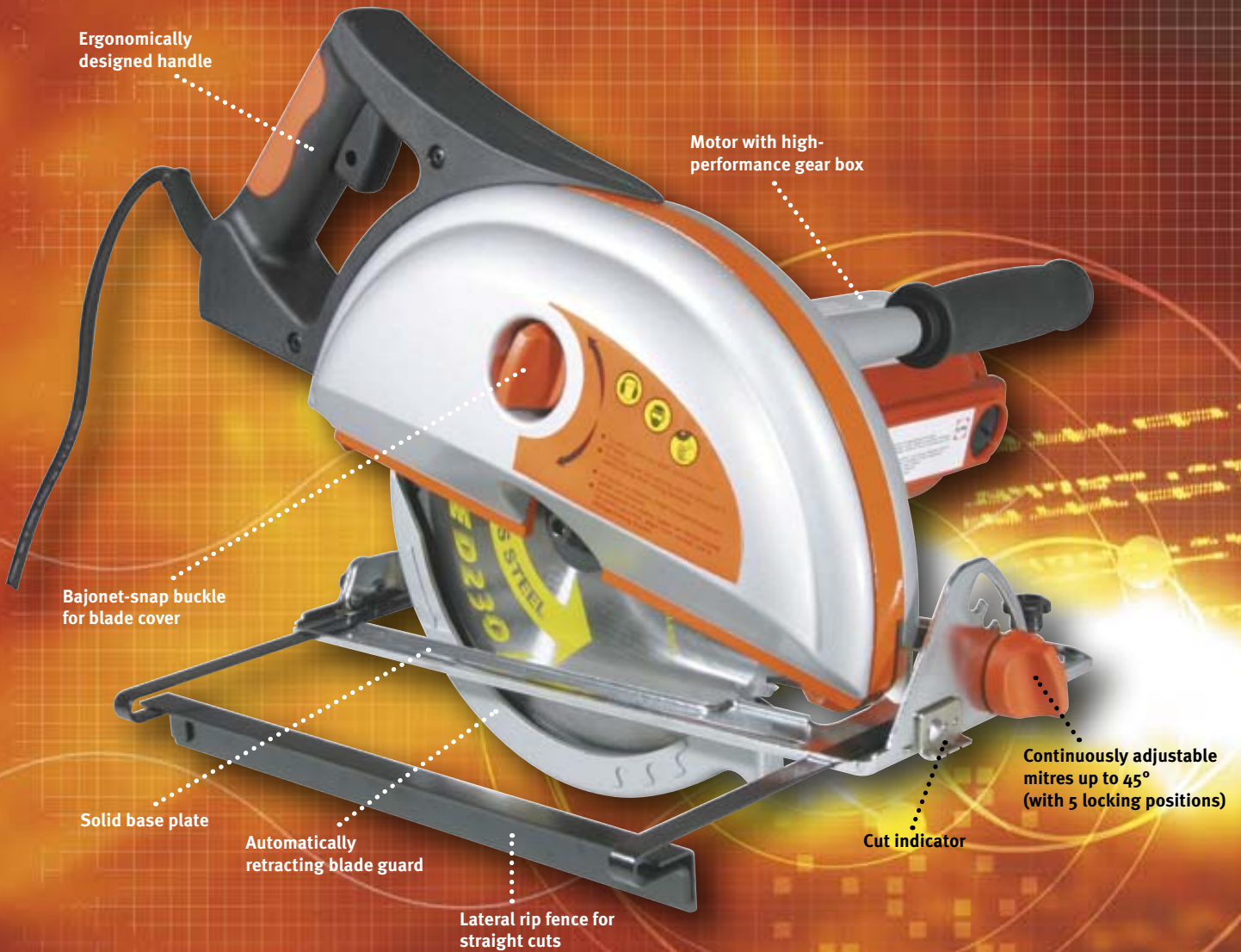


ALFRA ROTASPEED®





ALFRA ROTASPEED® – Metal Cutting Saw RS 200 + RS 230

HAND OPERATED



The ideal machine for worksite and workshop, for almost burr-free cutting without cooling.

For fast and clean cuts in pipes, threaded rods, profiles, wire ducts, corrugated and trapezoidal sheets, sandwich panels, dry mortarless construction profiles and many more.

Advantages at a glance:

- 1700 Watt high-performance motor for exact cuts without coolant.
- Fast and easy change of saw blade.
- Continuously adjustable cutting depth to 67 mm at RS 200 and 82 mm at RS 230.
- The base blade is adjustable for mitre cuts up to 45°.
- Chip collector.
- The ideal machine for site assembly companies, facade builders, repair shops, locksmitheries, rack builders, roofers, booth builders, welding shops, plumbing and heating contractors.
- Ideally applicable, where angle grinders aren't strong enough or clean enough.
- Ideal for weld preparation by mitre cutting.



ALFRA RotaSpeed® RS 200

Saw blade diameter:	200 mm (8")
Saw blade arbor:	30/25.4/20 mm
Power:	1700 Watts
Speed, rpm:	3700
Mitre:	0 - 45°
Cutting capacity mm 0°:	67
Cutting capacity mm 45°:	42
Max. material thickness (depending on material):	6 mm
Voltage:	230 - 50/60 Hz
Weight:	6.3 kg

Prod.-No.

Alfra RotaSpeed® RS 200

22400

ALFRA RotaSpeed® RS 230

Saw blade diameter:	230 (9")
Saw blade tool holder:	30/25.4/20 mm
Power:	1700 Watts
Speed, rpm:	2600
Mitre:	0 - 45°
Cutting capacity mm 0°:	82
Cutting capacity mm 45°:	56
Max. material thickness (depending on material):	6 - 8 mm
Voltage:	230 - 50/60 Hz
Weight:	7.1 kg

Prod.-No.

Alfra RotaSpeed® RS 230

22410

Scope of Supply:

Machine with 2 TCT Saw Blades (premium quality), Operation Manual, Rip Fence, Set of Tools, Distance sleeve for Saw Blade Arbor, in cardboard box.



We reserve the right to make technical changes.



ALFRA CIRCULAR SAW BLADES – RotaSpeed®

ALFRA-ROTA SPEED® TCT CIRCULAR SAW BLADES. • MADE IN GERMANY

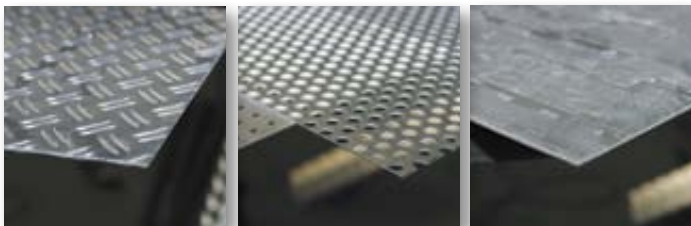
- Tungsten carbide tipped, suitable for metal cutting saws from: ALFRA, Flex, Euroboor, Evolution, Hitech, Jepson, Metallkraft, Ridgid, etc.
- These special TCT circular saws ensure fast and clean cuts in pipes, threaded rods, profiles, corrugated and trapezoidal sheets, wire ducts, sandwich panels, dry mortarless construction profiles, fastening profiles (DIN rails), grates using dry cutting method.
- For use on metals, CrNi steel*, aluminium.
- High cutting performance and tool life. The excellent price/performance ratio makes these saws highly economical.
- **The corresponding manufacturer's machine guidelines and notes on use must be observed when using these saw blades.**

Premium Quality

Cutting Ø mm	Application	Dimensions mm	No. of teeth	Prod.-No.
180/7"	Steel*	180 x 20	34	22205
180/7"	Aluminium	180 x 20	48	22206
200/8"	Steel*	200 x 20	42	22255
200/8"	Aluminium	200 x 20	54	22256
200/8"	for trapezoidal sheets	200 x 20	68	22257
230/9"	Steel*	230 x 25.4	48	22305
230/9"	Aluminium	230 x 25.4	62	22306
230/9"	for trapezoidal sheets	230 x 25.4	80	22307

* With stainless steel, the tool life will be lower in relation to the material thickness.

Packaging unit = 1 piece



Prod.-No. 18654

Magnetic Chip Remover

In a stainless steel round rod, you can move a magnet back and forth. The strong magnet picks up metal chips – pull a knob and the chips fall off. For more cleanliness in the work place.

Prod.-No.

ALFRA Magnetic Chip Remover, Length 400 mm

18654





ALFRA ROTADRY® – Drycutter 355

Arguments which are convincing in quality, performance and pricing:

- For almost burr-free cutting of profiles and pipes out of steel, iron, copper, brass, aluminium, plastics, composites and stainless steel without cooling.
- Application e.g. in steel construction, cabinet making, interior fittings etc.
- With depth fence for accurate cutting
- Angle and parallel stopper for mitre cuts up to 45°
- With a removable chip collecting sump
- With arbor adjustment for changing the saw blades
- Easy to transport

ALFRA RotaDry® 355

Saw blade diameter	355 mm	
Motor	230 V/50 Hz	
Input	2200 W	
Speed	1300 rpm	
Cutting capacity 90°	13 mm wall thickness	180 x 105 mm
Cutting capacity 90°	13 mm wall thickness	120 x 120 mm
Cutting capacity 90°	13 mm wall thickness	135 mm
Cutting capacity 45°	13 mm wall thickness	110 x 100 mm
Cutting capacity 45°	13 mm wall thickness	100 x 100 mm
Cutting capacity 45°	13 mm wall thickness	105 mm
Weight	23 kg	

Alfra RotaDry® 355, with 1 TCT Saw Blade 72 T (teeth)	Prod.-No. 22420
---	---------------------------



Prod.-No. 22420

Spare TCT Circular Saw Blades

also suitable for cutting-off machines, such as:

Jepson/Global/Ridgid/Ryobi

The universal TCT saw blade for fast cutting of:

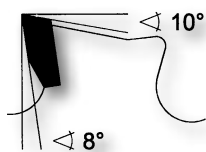
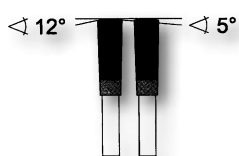
steel – copper – aluminium – profiles – cable – sheet metal – solid material

- without coolant
- Regrindable
- Low noise due to laser ornaments

Deliverable dimensions	Steel	Stainless steel*	Prod.-No.
305 x 2.2 x 25.4 60 T	•	–	32100
305 x 2.2 x 25.4 80 T	•	•	32101
355 x 2.6 x 25.4 72 T	•	–	32104
355 x 2.6 x 25.4 80 T	•	•	32103
355 x 2.6 x 25.4 90 T	•	•	32102
355 x 2.6 x 25.4 90 T	coated		32105

Other tooth counts upon request.

* With stainless steel, the tool life will be lower in relation to the material thickness.



355 x 2.6 x 25.4 • 90 T • coated

ALFRA



RBX 120 HV



RBX 180 HV

ROTAFLEX®

Portable Band Saw Machines for Professionals

There is a variety of portable band saw machines, but only a few of them are suitable for industrial applications or at a construction site. Pricing is usually being more important than reliability and durability.

Our new machines have an excellent price-performance-ratio and are setting new standards. The robust and compact design makes it ideal for handling in the machine shop or the construction site.

Ideally qualified for locksmiths, plumbing, metal-, heating-, pipeline- and mechanical workshops. Also for construction companies, public utilities with or without mobile workshops, power stations, schools, technical learning and teaching facilities.

Special Features:

- Portable
- Mobile
- Change from horizontal or vertical cutting within seconds. With help of the vertical section notches or contours can be cut out easily from radius 85 mm on.
- For vertical section 0 - 45 ° stepless
- Very fast band saw blade-change, as the change is on the front side
- Cutting pressure adjustment in 4 steps, matched to the material cross section
- Safe material clamping due to quick-vice application
- Robust high-performance single-phase-motor
- 4-fold ball bearings-blade guide RBX 120 HV
- 8-fold ball bearings-blade guide RBX 180 HV
- Adjustable ball bearings-blade guide for angular cutting

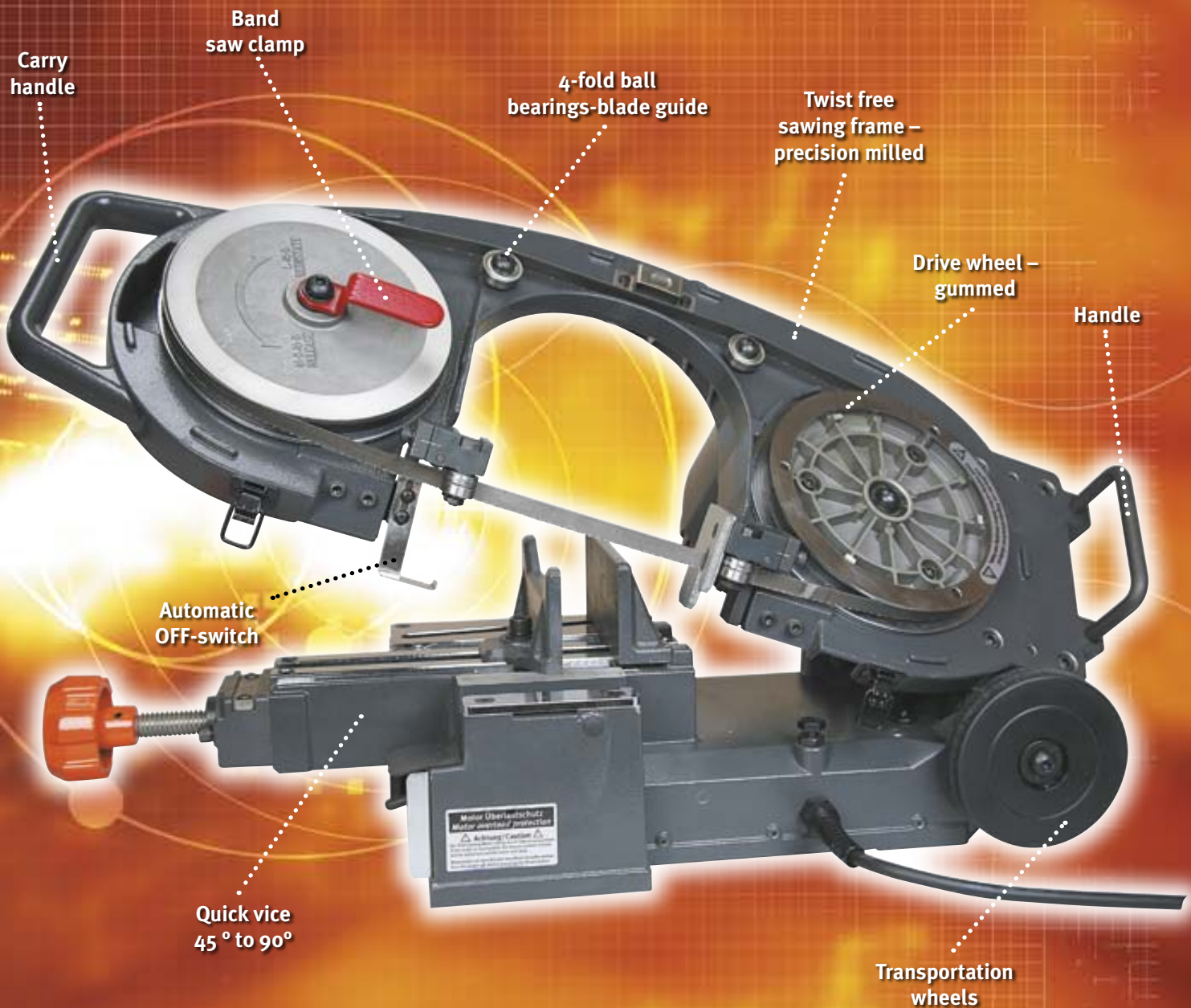


B



ALFRA Band Saw Machine

RBX 120 HV



ALFRA BAND SAW MACHINE – RBX 120 HV

Our portable Band Saw Machine RBX 120 HV cuts reliably gas pipes and conduits as well as thin walled pipes made of stainless steel, construction steel, aluminium and PVC. Furthermore it's particularly suitable for cutting flat and profiled materials.

90°	∅	120 mm; 4-3/4"
	□	105 mm; 4-1/8"
	●	60 mm; 3-3/8"
45°	∅	50 mm; 2"
	□	50 mm; 2"



Technical Data:

Induction motor, capacity	400 Watts
Power	230 V
Cutting speed	40.5 m/min ⁻¹ – 50 Hz 49.0 m/min ⁻¹ – 60 Hz
Feed	Automatic
Cutting pressure adjustment:	4 steps
Mitre	0 - 45°
Band saw measurements	1430 x 13 x 0.65 mm; 56-1/3" x 1/2" x 0.025"
90°	∅ 120 mm; 4-3/4" □ 105 mm; 4-1/8" ● 60 mm; 3-3/8"
45°	∅ 50 mm; 2" □ 50 mm; 2"
ED:	40 %
Sound level (during no-load operation)	75 dB(A)
Unit size (mm)	length 780, width 340, high 335
Weight:	35 kg; 77 lbs

Standard Accessories:

- Portable Band Saw Machine RBX 120 HV – 230 V (110 V on demand)
- HSS Bi-Metal Band saw blade
- Operator protection plug
- Tool kit
- Operation manual

			Prod.-No.
Band Saw Machine RBX 120 HV			22500
Special Accessories			
Enlarged saw table 150 x 100 mm; 6" x 3-15/16"			22523
Replacement Band Saw Blades HSS-Bi-Metal			
1430 x 13 x 0.65 mm; 56-1/3" x 1/2" x 0.025"			
HSS Bi-Metal	10 tpi	IPU = 10 pcs	22510
HSS Bi-Metal	14 tpi	IPU = 10 pcs	22511
HSS Bi-Metal	6/10 tpi	IPU = 10 pcs	22512
HSS Bi-Metal	8/12 tpi	IPU = 10 pcs	22513
HSS Bi-Metal	10/14 tpi	IPU = 10 pcs	22514

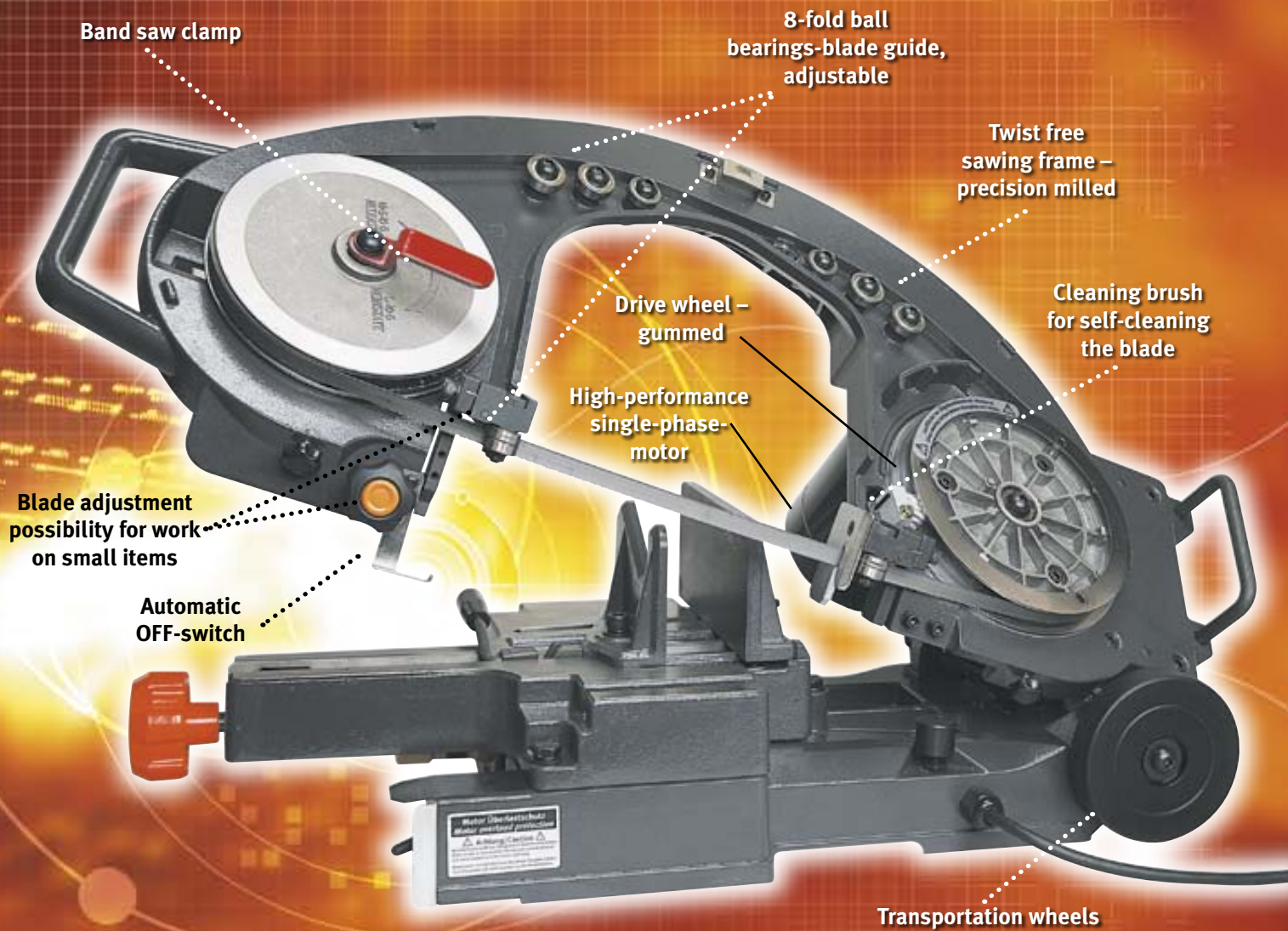


B



ALFRA Band Saw Machine

RBX 180 HV



Optional:
Chain vice for pipes and profiles (90° only)



ALFRA BAND SAW MACHINE – RBX 180 HV

Our Band Saw Machine RBX 180 HV features all technical advantages of the small one but with extended capacity:

90°	∅	180 mm, 7"
	□	150 mm; 6"
45°	∅	80 mm, 3-5/32"
	□	80 mm, 3-5/32"

The standard quick-clamping flat vice can be changed into a chain vice within seconds. Therefore big diameter tubes can be clamped tightly and machined.



Technical Data:

Induction motor, capacity	380 Watts	
Power	230 V	
Cutting speed	40.5 m/min ⁻¹ – 50 Hz	
	49.0 m/min ⁻¹ – 60 Hz	
Feed	Automatic	
Cutting pressure adjustment	4 steps	
	0-45° with quick clamp flat vice;	
Mitre	90° with chain vice	
Band saw measurements:	1625 x 13 x 0, 65 mm; 64" x 1/2" x 0.025"	
90°	∅	180 mm, 7"
	□	150 mm; 6"
45°	∅	80 mm, 3-5/32"
	□	80 mm, 3-5/32"
ED:	40 %	
Sound level	75 dB(A)	
(during no-load operation)		
Unit size (mm)	length 865, width 335, high 415	
Weight	41 kg, 90 lbs with chain vice;	
	46 kg, 101 lbs with quick clamp flat vice	



Chain vice (optional)

Cutting pressure adjustable



Standard Accessories:

- Portable Band Saw Machine RBX 180 HV – 230 V (110 V on demand)
- Quick clamp flat vice
- 2 pieces HSS Bi-Metal Band saw blades (one saw blade is stored safely inside protection cover).....
- Operator protection plug
- Tool kit
- Operation manual

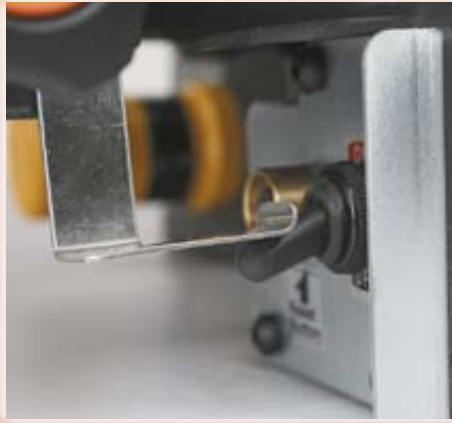


				Prod.-No.
Band Saw Machine RBX 180 HV				22520
Chain vice				22522
Special accessories				
Enlarged saw table 150 x 100 mm; 6" x 3-15/16"				22523
Replacement Band Saw Blades HSS-Bi-Metal 1625 x 13 x 0.65 mm; 64" x 1/2" x 0.025"				
HSS Bi-Metal	10 tpi	IPU = 10 pcs		22530
HSS Bi-Metal	14 tpi	IPU = 10 pcs		22531
HSS Bi-Metal	6/10 tpi	IPU = 10 pcs		22532
HSS Bi-Metal	8/12 tpi	IPU = 10 pcs		22533
HSS Bi-Metal	10/14 tpi	IPU = 10 pcs		22534

ALFRA RBX BAND SAW MACHINES IN ACTION



Enlarged saw table



Automatic OFF Switch
RBX 120 HV + 180 HV



Mitre Saw up to 45°
RBX 120 HV + 180 HV



Vertical cutting, here with extended support surface, RBX 120 HV + 180 HV



Cleaning brush
RBX 180 HV



Quick vice
RBX 180 HV



Change from quick vice to chain vice within seconds – RBX 180 HV



Changeable chain vice in action
RBX 180 HV



Clamped pipe in chain vice
RBX 180 HV



ALFRA HSS-Bit

Features:

- M42
- High concentricity
- With solid base plate, thus more threads and higher stability as well as concentric running exactness.
- For material from 2 mm – with positive chipping and cutting angles as well as combi-toothing 4/6 tpi. This variable spacing provides a more even cut, for a minor generation of vibrations and heat. Lower expenditure of energy when cutting.
- Cutting Depth: 38 mm (1 1/2").
- Lateral slots help to remove the core.
- Suitable for unalloyed steel (up to 700 N/mm²), nonferrous metals, light metals, plastics, gypsum, pulp wood- and plywood boards, lightweight building boards and general wood processing.
- Drill bit exchangeable with other commercially available arbors.



METAL HOLE SAWS

▶ WITH COBALT-ALLOYED TEETH (M42)



Also steel/stainless steel up to approx. 3 mm, can be worked easily (for frequent use, we recommend our TCT Hole Saws).



... tailored to work on softwoods.



ALFRA – HSS-Bi-Metal Hole Saws

ALFRA HSS-Bi-Metal Hole Saws are applicable in portable and pillar drilling machines. When using pillar drilling machines, use manual feed only.

Features:

- M42
- High concentricity.
- With solid base plate, thus more threads and higher stability as well as concentric running exactness.
- With positive chipping and cutting angles as well as combi-toothing 4/6 tpi. This variable spacing provides a more even cut, for a minor generation of vibrations and heat. Lower expenditure of energy when cutting.
- Cutting Depth: 38 mm (1 1/2").
- Lateral slots help to remove the core.
- Suitable for unalloyed steel (up to 700 N/mm²), nonferrous metals, light metals, plastics, gypsum, pulp wood- and plywood boards, lightweight building boards and general wood processing.
- Drill bit exchangeable with other commercially available arbors.

Tip:

Start drilling operation with light pressure. Continue with light and steady pressure, avoid pendulum motion, follow the speed chart, use coolant. When cutting wood or wood substitutes, remove drill dust in time.



Combi toothing 4/6 tpi



Ø from 14.0 to 210 mm available

Saw-Ø mm	Inch	Prod.-No.
14.0	9/16	0500014
16.0	5/8	0500016
17.0	11/16	0500017
19.0	3/4	0500019
20.0	15/16	0500020
21.0	13/16	0500021
22.0	7/8	0500022
24.0	15/16	0500024
25.0	1	0500025
27.0	1 1/16	0500027
29.0	1 1/8	0500029
30.0	1 3/16	0500030
32.0	1 1/4	0500032
33.0	1 5/16	0500033
35.0	1 3/8	0500035
37.0	1 7/16	0500037
38.0	1 1/2	0500038
40.0	1 9/16	0500040
41.0	1 5/8	0500041
43.0	1 11/16	0500043
44.0	1 3/4	0500044
46.0	1 13/16	0500046
48.0	1 7/8	0500048
51.0	2	0500051
52.0	2 1/16	0500052
54.0	2 1/8	0500054
57.0	2 1/4	0500057
59.0	2 3/16	0500059
60.0	2 3/8	0500060
64.0	2 1/2	0500064
65.0	2 9/16	0500065
67.0	2 5/8	0500067
68.0	2 11/16	0500068
70.0	2 3/4	0500070
73.0	2 7/8	0500073





ALFRA – HSS-Bi-Metal Hole Saws



Saw-Ø mm	Inch	Prod.-No.
74.0	2 ¹¹ / ₁₂	0500074
76.0	3	0500076
79.0	3 ¹ / ₈	0500079
83.0	3 ³ / ₈	0500083
86.0	3 ³ / ₈	0500086
89.0	3 ¹ / ₂	0500089
92.0	3 ³ / ₈	0500092
95.0	3 ³ / ₄	0500095
98.0	3 ⁷ / ₈	0500098
102.0	4	0500102
105.0	4 ¹ / ₈	0500105
108.0	4 ¹ / ₄	0500108
111.0	4 ³ / ₈	0500111
114.0	4 ¹ / ₂	0500114
121.0	4 ³ / ₄	0500121
127.0	5	0500127
140.0	5 ¹ / ₂	0500140
152.0	6	0500152

From Ø 160.0 mm only suitable for wood and wood substitutes.

160.0	6 ⁵ / ₁₆	0500160
168.0	6 ¹⁰ / ₁₆	0500168
177.0	7	0500177
210.0	8 ⁵ / ₁₆	0500210



Prod.-No. 0501013 with bi-metal hole saw Ø 68 mm + A2-SS

Arbors

with guiding drill bit

Saw-Ø mm	Saw-Ø inch	Type	Shank-Ø	Prod.-No.
14 - 30	9/ ₁₆ - 1 ³ / ₁₆	A 6-SS	9.5 hexagon	0501001
14 - 30	9/ ₁₆ - 1 ³ / ₁₆	A 6-SDS	SDS	0501002
32 - 152	1 ¹ / ₄ - 6	A 2-SS	9.5 hexagon	0501003
32 - 152	1 ¹ / ₄ - 6	A 2-SDS	SDS	0501005
32 - 210	1 ¹ / ₄ - 8 ⁵ / ₁₆	A 3-SS	11.11 hexagon	0501006
32 - 210	1 ¹ / ₄ - 8 ⁵ / ₁₆	A 5-SS	16.0 hexagon	0501008

Accessories:

Rim countersink for Ø 68 mm (with TCT-teeth)	0501013
Extension shaft 300 mm x 9.5 mm for A 6-SS + A 2-SS, A3-SS	0501010
Spare Center Drill HSS Ø 6,35 mm x 80 mm for A 6-SS + A 6-SDS + A 2-SS + A 2-SDS + A 3-SS + A 5-SS	0502001
Ejector Spring	0502004

Important: Disable impact drill when using SDS-shanks!

9.5 mm
3/8"

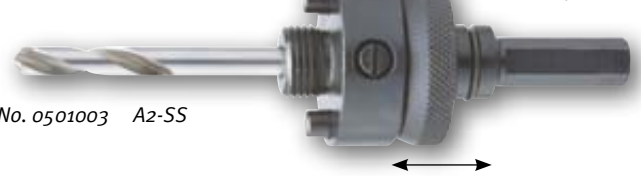


Prod.-No. 0501001 A6-SS



Prod.-No. 0501002 A6-SDS

9.5 mm
3/8"



Prod.-No. 0501003 A2-SS



Prod.-No. 0501005 A2-SDS

11.11 mm
7/16"



Prod.-No. 0501006 A3-SS



Prod.-No. 0501013



Diverse applications



Prod.-No. 0501010



Prod.-No. 0502001



Prod.-No. 0502004

The following HSS-Bi-Metal Hole Saw Sets enlarge our range. These sets were especially compiled for electricians, mechanics, plumbers and for general, universal applications. These sets improve the presentation. Storage in solid tool cases.

Hole Saw Set Standard

Prod.-No.

0503006

Contents:

- Ø 16 mm ($\frac{5}{8}$ "
- Ø 19 mm ($\frac{3}{4}$ "
- Ø 22 mm ($\frac{7}{8}$ "
- Ø 29 mm ($1 \frac{1}{8}$ "
- Ø 35 mm ($1 \frac{3}{8}$ "
- Ø 44 mm ($1 \frac{3}{4}$ "
- Ø 52 mm ($2 \frac{1}{16}$ "
- Ø 57 mm ($2 \frac{1}{4}$ "
- Ø 67 mm ($2 \frac{5}{8}$ "

Arbor A6-SS, Arbor A2-SS, Spare Twist Drill



Prod.-No. 0503006

Hole Saw Set Professional

Prod.-No.

0503007

Contents:

- Ø 16 mm ($\frac{5}{8}$ "
- Ø 19 mm ($\frac{3}{4}$ "
- Ø 22 mm ($\frac{7}{8}$ "
- Ø 25 mm (1")
- Ø 29 mm ($1 \frac{1}{8}$ "
- Ø 32 mm ($1 \frac{1}{4}$ "
- Ø 35 mm ($1 \frac{3}{8}$ "
- Ø 38 mm ($1 \frac{1}{2}$ "
- Ø 44 mm ($1 \frac{3}{4}$ "
- Ø 51 mm (2")
- Ø 64 mm ($2 \frac{1}{2}$ "
- Ø 76 mm (3")

Arbor A6-SS, Arbor A2-SS, Spare Twist Drill



Prod.-No. 0503007

Hole Saw Set Electro

Prod.-No.

0503008

Contents:

- Ø 22 mm ($\frac{7}{8}$ "
- Ø 29 mm ($1 \frac{1}{8}$ "
- Ø 35 mm ($1 \frac{3}{8}$ "
- Ø 44 mm ($1 \frac{3}{4}$ "
- Ø 51 mm (2")
- Ø 64 mm ($2 \frac{1}{2}$ "
- Ø 68 mm ($2 \frac{11}{16}$ "

Arbor A6-SS, Arbor A2-SS, Spare Twist Drill



Prod.-No. 0503008

Hole Saw Set Sanitary

Prod.-No.

0503009

Contents:

- Ø 16 mm ($\frac{5}{8}$ "
- Ø 19 mm ($\frac{3}{4}$ "
- Ø 24 mm ($\frac{15}{16}$ "
- Ø 29 mm ($1 \frac{1}{8}$ "
- Ø 38 mm ($1 \frac{1}{2}$ "
- Ø 44 mm ($1 \frac{3}{4}$ "
- Ø 57 mm ($2 \frac{1}{4}$ "
- Ø 67 mm ($2 \frac{5}{8}$ "

Arbor A6-SS, Arbor A2-SS, Spare Twist Drill



Prod.-No. 0503009

Sales Display on request!

ALFRA - HOLE SAWS

THE QUALITY IS IN THE DETAIL

- 1 FIXATION ARBOR-SHANK
- 2 FIXING SCREW FOR CENTER DRILL
- 3 EJECTOR HOLES
- 4 THE EJECTOR SPRING EJECTS THE WASTE AND PROTECTS THE TCT-THEETH WHEN CENTER DRILLING
- 5 TAPERED CENTER DRILL, CENTERING WITHOUT RUNNING OFF (CENTER PUNCHING NOT NECESSARY)



TCT-Hole Saws in use



TCT-Hole Saws – short-/long type



Stainless steel



Plastic



Poroton stone



TCT-Hole Saws – FRP type



TCT-Hole Saws – MBS type



Sanitary pipes – type SML



MBS Pro
Use on Rotabest Magnetic Drilling Machine
with MT3 – Arbor Prod.-No.: 0734003



Checker plate (VA)



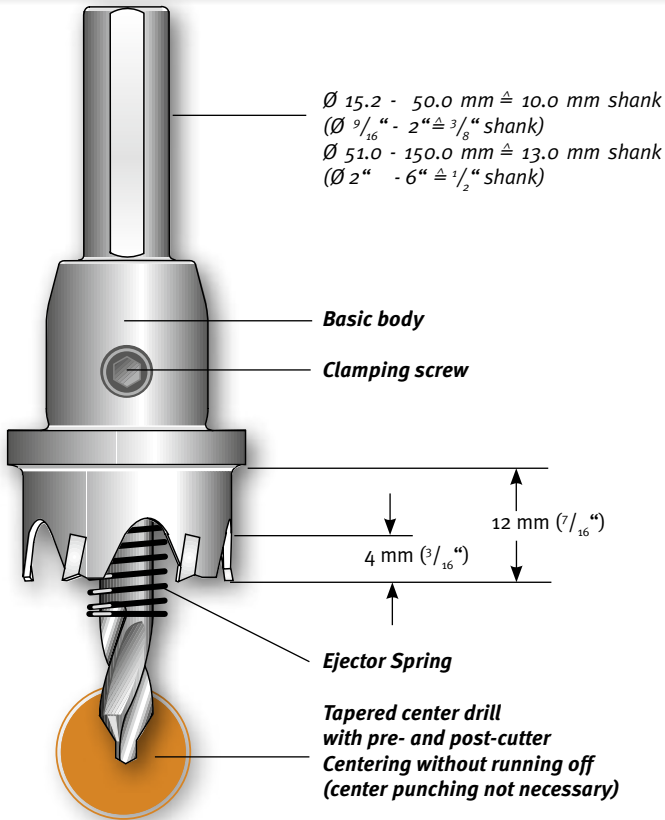
Sanitary pipes – type SML

B



ALFRA TCT-HOLE SAWS – Short Type

Made in Germany by ALFRA



The application area of TCT Hole Saws differs from HSS-Bi-Metal Hole Saws. With ALFRA TCT Hole Saws, suitable to economically process stainless steel up to 2 mm (1/16"), unalloyed steels up to 4 mm (3/16"), plastics, PVC, aluminium, zinc, gypsum plaster boards and lightweight building boards, as well as asbestos. Do not use automatic feed, when working with pillar drilling machines. For the use on portable- and pillar drilling machines. Do not use automatic feed, when working with pillar drilling machines.

Features:

- High concentric running exactness through solid construction.
- CAD-optimized cutting angles with specially ground section ensures high cutting capacity and long tool life.
- Quick removal of drilled core through ejector spring for all hole saws up to 150 mm (5 29/32") Ø.
- Carbide tipping enables repeated re-grinding.
- ALFRA hole saws are repairable. In the event of a tooth breaking, it can easily be replaced and resharpened.
- Exchangeable center pin.
- Use of MT tool holders from $\varnothing 31 \text{ mm}$ (1 7/32").
- For use on hand drilling machines (recommended up to max. $\varnothing 40 \text{ mm}$; 1 9/16") or stationary machines.

Tips:

- At thicker materials: cut 2-3 mm per cutting process, remove chips afterwards.
- When cutting metals, a high- grade cutting oil should be used. Exception: Do not use cutting oil when using cast iron, use paraffin instead of oil when cutting aluminium.
- **Keep in mind: Always wear safety goggles.**

Another special technical feature:

From $\varnothing 15.2 \text{ mm}$ (3/16") to 30.0 mm (1 1/8"), the hole saw is made of one piece.

From $\varnothing 31.0 \text{ mm}$ (1 3/16") we use specially hardened tool holders to compensate for the torsional power in case of heavy operation, which avoids early shearing off of the tool holder shank.

In terms of construction not comparable with any other make.





B

ALFRA TCT-HOLE SAWS – SHORT TYPE

Made in Germany by ALFRA



Ø mm	Ø Inch	No. of teeth	Prod.-No.	
			mm	Inch
Ø 15.2			0600152	
Ø 16.0	5/8"	4	0600160	0630160
Ø 17.0		4	0600170	
Ø 18.0	11/16"	4	0600180	0630180
Ø 18.6		4	0600186	
Ø 19.0	3/4"	4	0600190	0630190
Ø 20.0		5	0600200	
Ø 20.4		5	0600204	
Ø 21.0	13/16"	5	0600210	0630210
Ø 22.0		5	0600220	
Ø 22.5		5	0600225	
Ø 23.0	7/8"	5	0600230	0630230
Ø 24.0	15/16"	5	0600240	0630240
Ø 25.0		5	0600250	
Ø 26.0	1"	5	0600260	0630260
Ø 27.0	1-1/16"	5	0600270	0630270
Ø 28.0		5	0600280	
Ø 28.3		5	0600283	
Ø 29.0	1-1/8"	5	0600290	0630290
Ø 30.0	1-3/16"	5	0600300	0630300
Ø 31.0		6	0600310	
Ø 32.0	1-1/4"	6	0600320	0630320
Ø 33.0		6	0600330	
Ø 34.0	1-5/16"	6	0600340	0630340
Ø 35.0	1-3/8"	6	0600350	0630350
Ø 36.0		6	0600360	
Ø 37.0	1-7/16"	7	0600370	0630370
Ø 38.0		7	0600380	
Ø 39.0	1-1/2"	7	0600390	0630390
Ø 40.0	1-9/16"	7	0600400	0630400
Ø 41.0		8	0600410	
Ø 42.0	1-5/8"	8	0600420	0630420
Ø 43.0	1-11/16"	8	0600430	0630430
Ø 44.0		8	0600440	
Ø 45.0	1-3/4"	8	0600450	0630450
Ø 46.0		8	0600460	
Ø 47.0	1-13/16"	9	0600470	0630470
Ø 48.0	1-7/8"	9	0600480	0630480
Ø 49.0		9	0600490	
Ø 50.0	1-15/16"	9	0600500	0630500
Ø 51.0	2"	9	0600510	0630510
Ø 52.0		10	0600520	
Ø 53.0	2-1/16"	10	0600530	0630530
Ø 54.0	2-1/8"	10	0600540	0630540
Ø 55.0		10	0600550	
Ø 56.0	2-3/16"	10	0600560	0630560
Ø 57.0	2-1/4"	10	0600570	0630570
Ø 58.0		10	0600580	
Ø 59.0	2-5/16"	10	0600590	0630590
Ø 60.0	2-3/8"	10	0600600	0630630
Ø 61.0		11	0600610	
Ø 62.0	2-7/16"	11	0600620	0630620
Ø 63.0		11	0600630	
Ø 64.0	2-1/2"	11	0600640	0630640
Ø 65.0		11	0600650	
Ø 66.0	2-9/16"	12	0600660	0630660
Ø 67.0	2-5/8"	12	0600670	0630670
Ø 68.0		12	0600680	
Ø 69.0	2-11/16"	12	0600690	0630690
Ø 70.0	2-3/4"	12	0600700	0630700
Ø 71.0		12	0600710	
Ø 72.0	2-13/16"	13	0600720	0630720
Ø 73.0	2-7/8"	13	0600730	0630730
Ø 74.0	2-15/16"	13	0600740	0630740
Ø 75.0		13	0600750	
Ø 76.0	3"	13	0600760	0630760

Ø mm	Ø Inch	No. of teeth	Prod.-No.	
			mm	Inch
Ø 77.0		13	0600770	
Ø 78.0	3-1/16"	14	0600780	0630780
Ø 79.0	3-1/8"	14	0600790	0630790
Ø 80.0		14	0600800	
Ø 81.0	3-3/16"	14	0600810	0630810
Ø 82.0		14	0600820	
Ø 83.0	3-1/4"	14	0600830	0630830
Ø 84.0	3-5/16"	15	0600840	0630840
Ø 85.0		15	0600850	
Ø 86.0	3-3/8"	15	0600860	0630860
Ø 87.0	3-7/16"	15	0600870	0630870
Ø 88.0		15	0600880	
Ø 89.0	3-1/2"	16	0600890	0630890
Ø 90.0	3-9/16"	16	0600900	0630900
Ø 91.0		16	0600910	
Ø 92.0	3-5/8"	16	0600920	0630920
Ø 93.0		16	0600930	
Ø 94.0	3-11/16"	16	0600940	0630940
Ø 95.0	3-3/4"	17	0600950	0630950
Ø 96.0		17	0600960	
Ø 97.0	3-13/16"	17	0600970	0630970
Ø 98.0	3-7/8"	17	0600980	0630980
Ø 99.0		17	0600990	
Ø 100.0	3-15/16"	17	0601000	0631000
Ø 105.0	4"	18	0601050	0631050
Ø 110.0		18	0601100	
Ø 115.0	4-1/2"	20	0601150	0631150
Ø 120.0		20	0601200	
Ø 125.0		20	0601250	
Ø 130.0	5"	20	0601300	0631300
Ø 135.0		24	0601350	
Ø 140.0	5-1/2"	24	0601400	0631400
Ø 145.0		24	0601450	
Ø 150.0		24	0601500	



Prod.-No. 0600001

Set Metric

Prod.-No.

Set Metric	0600001
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Contents:
1 each of Ø 16/20/25/32/40 mm
2 Allen Keys



HSS-Spare Drill

with tapered center tip

from Ø 15.2 - 150.0 Ø 6x50 mm	0602650
from Ø 101.0 - 150.0 Ø 8x50 mm (old design)	0602850

MT Arbors



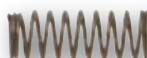
MT-2 (Ø 31.0 - 100.0 mm)	0734002
MT-3 (Ø 31.0 - 150.0 mm)	0734003

SDS Arbor



SDS arbor shank (for use with Ø 31 - 100 mm)	060sds6
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Spare Ejector



from Ø 15.2 - 150.0 Ø 6 mm	0602006
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Coolant ALFRA

ALFRA BIO 2000 For mild steel St 37, 405 ml	21010
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ALFRA 3000 For stainless steel, 520 ml	21030
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Prod. No. 21010/21030

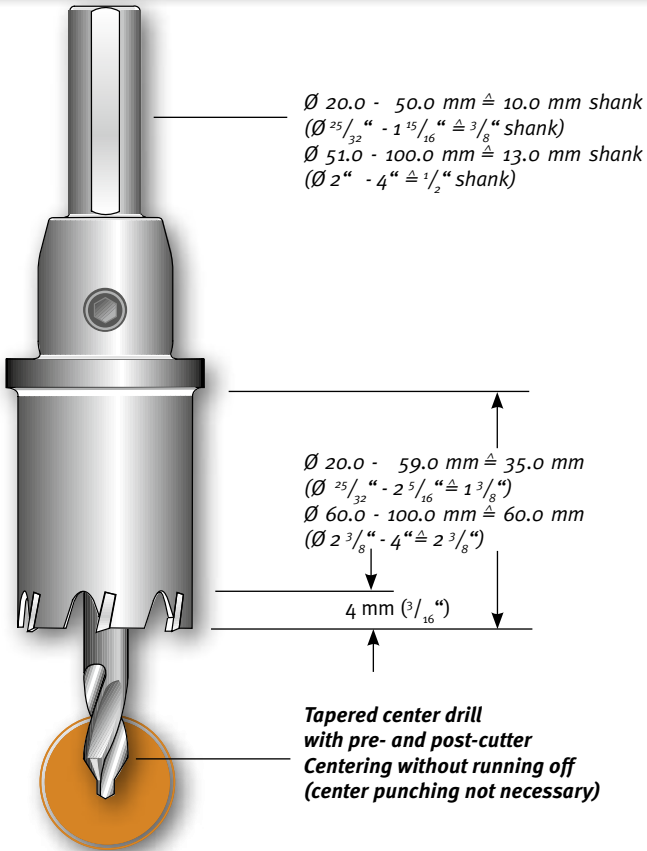


B



ALFRA TCT-HOLE SAWS – LONG TYPE

Made in Germany by ALFRA



stainless steel



Features:

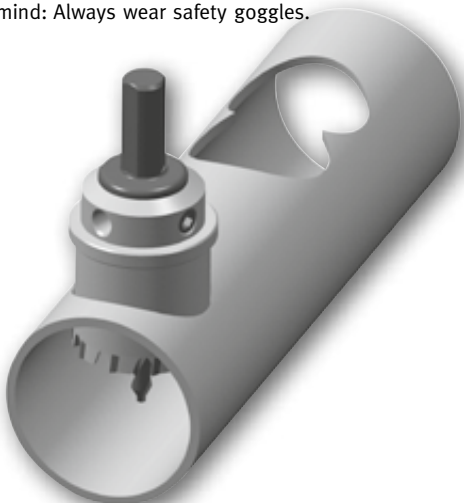
- Especially developed for the use on pipes, vaulted materials, for unalloyed and alloyed steels, nonferrous metals, plastics as well as glass fibre reinforced plastic.
- For material thickness up to 4 mm ($\frac{3}{16}''$), 2 mm ($\frac{1}{16}''$) stainless steel.
- For use on hand drilling machines, recommended up to max. $\varnothing 40 \text{ mm}$ ($1 \frac{9}{16}''$) or stationary machines.

Tips:

- Start drilling operation with light pressure, when drilling pipes. Avoid pendulum motions.
- Keep in mind: Always wear safety goggles.



Special tool for insulant



Special tools for special applications on request!



Special tool for Macrolon



ALFRA TCT-HOLE SAWS – LONG TYPE

Made in Germany by ALFRA

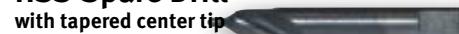


Ø mm	Ø Inch	No. of teeth	Prod.-No. mm	Inch
Ø 20.0		5	0700200	
Ø 20.4				
Ø 21.0	13/16"	5	0700210	0710210
Ø 22.0		5	0700220	
Ø 22.5				
Ø 23.0	7/8"	5	0700230	0710230
Ø 24.0	15/16"	6	0700240	0710240
Ø 25.0		6	0700250	
Ø 26.0	1"	6	0700260	0710260
Ø 27.0	1-1/16"	6	0700270	0710270
Ø 28.0		6	0700280	
Ø 28.3				
Ø 29.0	1-1/8"	6	0700290	0710290
Ø 30.0	1-3/16"	6	0700300	0710300
Ø 31.0		8	0700310	
Ø 32.0	1-1/4"	8	0700320	0710320
Ø 33.0		8	0700330	
Ø 34.0	1-5/16"	8	0700340	0710340
Ø 35.0	1-3/8"	8	0700350	0710350
Ø 36.0		8	0700360	
Ø 37.0	1-7/16"	8	0700370	0710370
Ø 38.0		8	0700380	
Ø 39.0	1-1/2"	8	0700390	0710390
Ø 40.0	1-9/16"	10	0700400	0710400
Ø 41.0		10	0700410	
Ø 42.0	1-5/8"	10	0700420	0710420
Ø 43.0	1-11/16"	10	0700430	0710430
Ø 44.0		10	0700440	
Ø 45.0	1-3/4"	10	0700450	0710450
Ø 46.0		10	0700460	
Ø 47.0	1-13/16"	10	0700470	0710470
Ø 48.0	1-7/8"	10	0700480	0710480
Ø 49.0		10	0700490	
Ø 50.0	1-15/16"	12	0700500	0710500
Ø 51.0	2"	12	0700510	0710510
Ø 52.0		12	0700520	
Ø 53.0	2-1/16"	12	0700530	0710530
Ø 54.0	2-1/8"	12	0700540	0710540

Ø mm	Ø Inch	No. of teeth	Prod.-No. mm	Inch
Ø 55.0		12	0700550	
Ø 56.0	2-3/16"	12	0700560	0710560
Ø 57.0	2-1/4"	12	0700570	0710570
Ø 58.0		12	0700580	
Ø 59.0	2-5/16"	12	0700590	0710590
Ø 60.0	2-3/8"	14	0700600	0710600
Ø 61.0		14	0700610	
Ø 62.0	2-7/16"	14	0700620	0710620
Ø 63.0		14	0700630	
Ø 64.0	2-1/2"	14	0700640	0710640
Ø 65.0		14	0700650	
Ø 66.0	2-9/16"	14	0700660	0710660
Ø 67.0	2-5/8"	16	0700670	0710670
Ø 68.0		16	0700680	
Ø 69.0	2-11/16"	16	0700690	0710690
Ø 70.0	2-3/4"	16	0700700	0710700
Ø 71.0		16	0700710	
Ø 72.0	2-13/16"	16	0700720	0710720
Ø 73.0	2-7/8"	16	0700730	0710730
Ø 74.0	2-15/16"	16	0700740	0710740
Ø 75.0		16	0700750	
Ø 76.0	3"	18	0700760	0710760
Ø 77.0		18	0700770	
Ø 78.0	3-1/16"	18	0700780	0710780
Ø 79.0	3-1/8"	18	0700790	0710790
Ø 80.0		18	0700800	
Ø 81.0	3-3/16"	18	0700810	0710810
Ø 82.0		18	0700820	
Ø 83.0	3-1/4"	18	0700830	0710830
Ø 84.0	3-5/16"	20	0700840	0710840
Ø 85.0		20	0700850	
Ø 86.0	3-3/8"	20	0700860	0710860
Ø 87.0	3-7/16"	20	0700870	0710870
Ø 88.0		20	0700880	
Ø 89.0	3-1/2"	20	0700890	0710890
Ø 90.0	3-9/16"	20	0700900	0710900
Ø 91.0		20	0700910	
Ø 92.0	3-5/8"	20	0700920	0710920

Ø mm	Ø Inch	No. of teeth	Prod.-No. mm	Inch
Ø 93.0		20	0700930	
Ø 94.0	3-11/16"	22	0700940	0710940
Ø 95.0	3-3/4"	22	0700950	0710950
Ø 96.0		22	0700960	
Ø 97.0	3-13/16"	22	0700970	0710970
Ø 98.0	3-7/8"	22	0700980	0710980
Ø 99.0		22	0700990	
Ø 100.0	3-15/16"	22	0701000	0711000
Ø 105.0	4"	22	0701050	0711050

HSS-Spare Drill with tapered center tip



von Ø 20.0 - 59.0	Ø 6x80 mm	0702680
von Ø 60.0 - 100.0	Ø 8x100 mm	0702800

MT Arbors



MT-2 (ab Ø 31.0)	0734002
MT-3 (ab Ø 31.0)	0734003

SDS Arbor



SDS arbor shank (for use with Ø 31 - 59 mm)	o60sds6
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HIGHLY RECOMMENDED ACCESSORIES – COOLANT AND LUBRICANT!

ALFRA BIO 2000

is a fully synthetic cutting oil, developed for high-quality cutting, threading and drilling of metals of any degree of hardness, ferrous metal, steel alloys, stainless steel, copper, aluminium and their alloys.

ALFRA BIO 2000 is free of hydrocarbon, sulphur and chlorine.



ALFRA 3000

Universal metal working oil free of chlorine. High-performance drilling, broaching and cutting fluid, petroleum-based, for moderately difficult and difficult to cut steels. With a high proportion of active ingredients to ensure optimum cutting performance and significantly reduced tool wear. It meets occupational health and safety requirements. **We recommend to use ALFRA 3000 especially for the drilling and threading of high-alloy steel and chrome nickel steel.**



Aerosol can 405 ml

21010

Aerosol can 520 ml

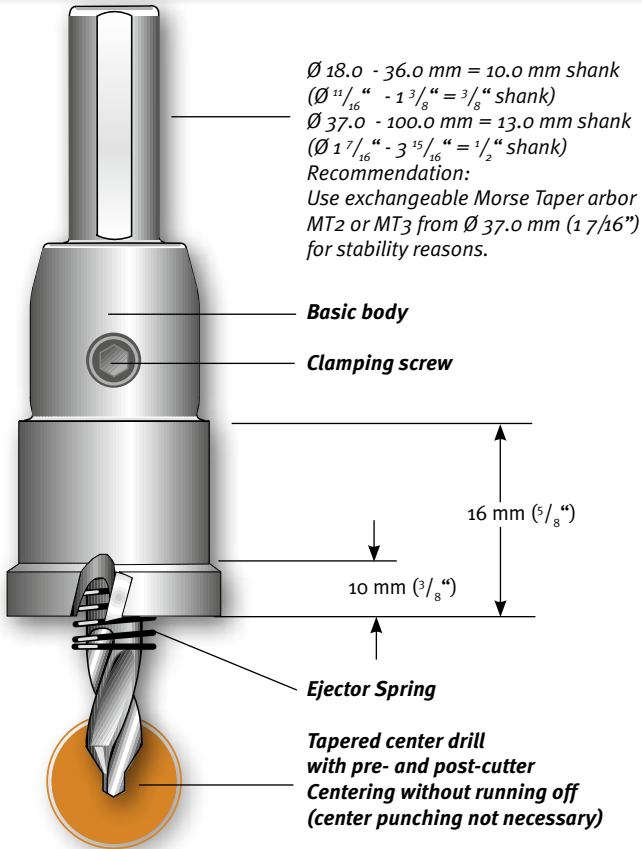
21030

B

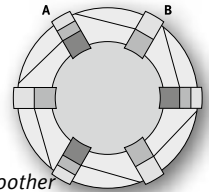
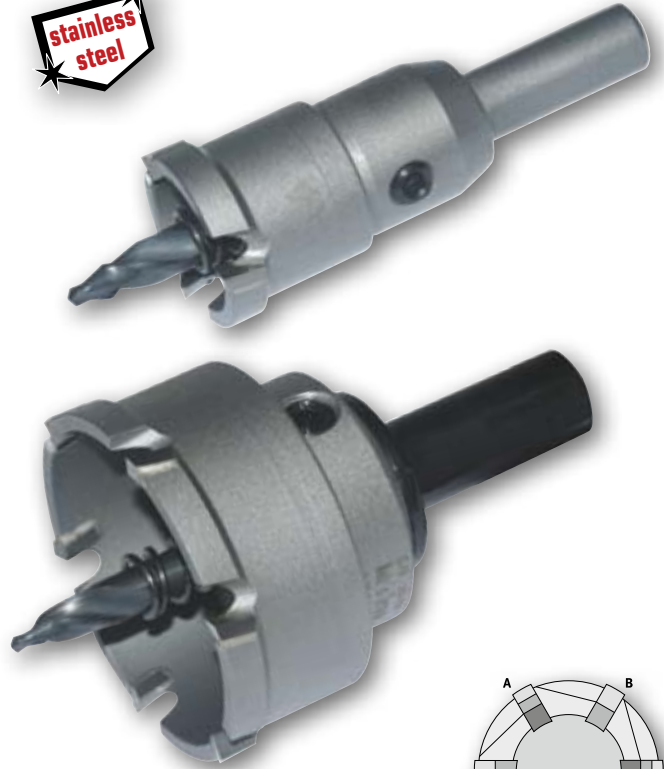


ALFRA TCT-HOLE SAWS – MBS-LIGHT

The TCT Multirange Hole Saw • Registered Utility Model No. 202 03 232 9



stainless steel



Cutting geometries
Variable teeth, less
Vibration, longer tool life, smoother
cutting.

This TCT Hole Saw is a multi-range Hole Saw for the universal use up to a material thickness of max. 10 mm (3/8") (without ejector spring). Through its solid construction and an enhanced cutting geometry (Registered Utility Model No. 202 03 232 9), an improved cutting behaviour combined with a high cutting capacity and tool life, is achieved.

For the use on flat steel, as well as on pipes and vaulted materials. Cutting of overlapping holes is possible.

For use on stationary and hand drilling machines (recommended up to max. Ø 40 mm; 1 9/16").

- Portable drilling Machines: up to 4 mm (1/8") material thickness
- Stationary drilling Machines: up to 10 mm (3/8") material thickness (for material thickness over 6 mm (15/64"), it is necessary to settle and empty the chips several times).

In case of heavy operation, we recommend Morse Taper Tool Holders, which are suitable from Ø 37 mm (1 7/16").

Advantage: All MBS-Light type TCT Hole Saws are equipped with an ejector spring.

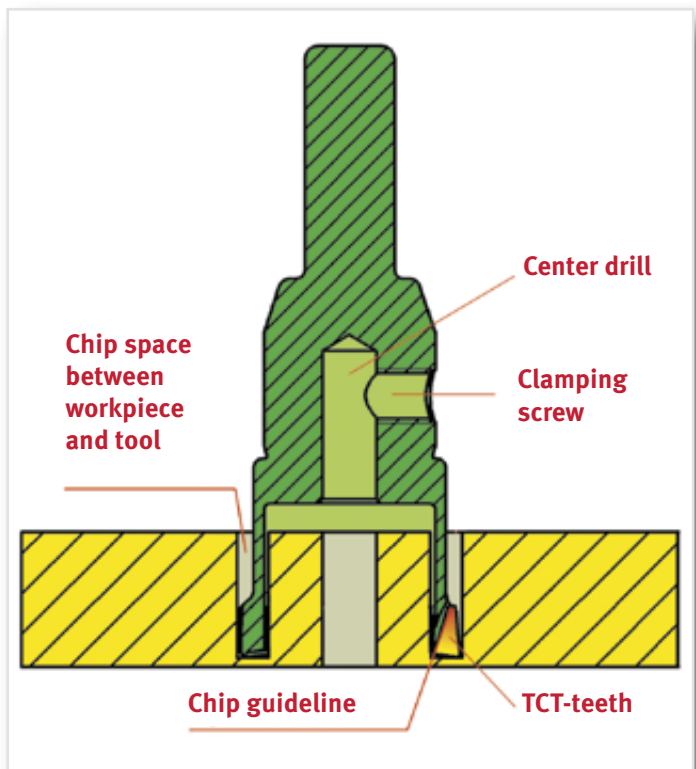
The cut material is self-ejecting. The cut material is self-ejecting.

Another special technical feature:

From Ø 37 mm (1 7/16"), specially hardened tool holders are used to compensate for the torsional power in case of heavy operation which avoids early shearing off of the tool holder shank.

In terms of construction not comparable with any other make.

MBS – for almost limitless use





B

ALFRA TCT-HOLE SAWS – MBS-LIGHT

The TCT Multirange Hole Saw • Registered Utility Model No. 202 03 232 9



Ø mm	Ø Inch	No. of teeth	Prod.-No. mm	Prod.-No. Inch
Ø 18.0	11/16"	6	0730018	0731018
Ø 18.6				
Ø 19.0	3/4"	6	0730019	0731019
Ø 20.0		6	0730020	
Ø 20.4				
Ø 21.0	13/16"	6	0730021	0731021
Ø 22.0		6	0730022	
Ø 22.5				
Ø 23.0	7/8"	6	0730023	0731023
Ø 24.0	15/16"	6	0730024	0731024
Ø 25.0		6	0730025	
Ø 26.0	1"	6	0730026	0731026
Ø 27.0	1-1/16"	6	0730027	0731027
Ø 28.0		6	0730028	
Ø 28.3				
Ø 29.0	1-1/8"	6	0730029	0731029
Ø 30.0	1-3/16"	6	0730030	0731030
Ø 31.0		6	0730031	
Ø 32.0	1-1/4"	6	0730032	0731032
Ø 33.0		6	0730033	
Ø 34.0	1-5/16"	6	0730034	0731034
Ø 35.0	1-3/8"	6	0730035	0731035
Ø 36.0		6	0730036	
From Ø 37.0 mm (1 7/16") we recommend the use of MT arbors				
Ø 37.0	1-7/16"	6	0730037	0731037
Ø 38.0		6	0730038	
Ø 39.0	1-1/2"	6	0730039	0731039
Ø 40.0	1-9/16"	6	0730040	0731040
Ø 41.0		6	0730041	
Ø 42.0	1-5/8"	6	0730042	0731042
Ø 43.0	1-11/16"	6	0730043	0731043
Ø 44.0		6	0730044	
Ø 45.0	1-3/4"	6	0730045	0731045
Ø 46.0		6	0730046	
Ø 47.0	1-13/16"	6	0730047	0731047
Ø 48.0	1-7/8"	6	0730048	0731048
Ø 49.0		6	0730049	
Ø 50.0	1-15/16"	6	0730050	0731050
Ø 51.0	2"	6	0730051	0731051
Ø 52.0		6	0730052	
Ø 53.0	2-1/16"	6	0730053	0731053
Ø 54.0	2-1/8"	6	0730054	0731054
Ø 55.0		6	0730055	
Ø 56.0	2-3/16"	6	0730056	0731056
Ø 57.0	2-1/4"	6	0730057	0731057
Ø 58.0		6	0730058	
Ø 59.0	2-5/16"	6	0730059	0731059
Ø 60.0	2-3/8"	8	0730060	0731060
Ø 61.0		8	0730061	
Ø 62.0	2-7/16"	8	0730062	0731062
Ø 63.0		8	0730063	
Ø 64.0	2-1/2"	8	0730064	0731064
Ø 65.0		8	0730065	
Ø 66.0	2-9/16"	8	0730066	0731066
Ø 67.0	2-5/8"	8	0730067	0731067
Ø 68.0		8	0730068	
Ø 69.0	2-11/16"	8	0730069	0731069
Ø 70.0	2-3/4"	8	0730070	0731070
Ø 71.0		10	0730071	
Ø 72.0	2-13/16"	10	0730072	0731072
Ø 73.0	2-7/8"	10	0730073	0731073
Ø 74.0	2-15/16"	10	0730074	0731074
Ø 75.0		10	0730075	
Ø 76.0	3"	10	0730076	0731076
Ø 77.0		12	0730077	

Ø mm	Ø Inch	No. of teeth	Prod.-No. mm	Prod.-No. Inch
Ø 78.0	3-1/16"	12	0730078	0731078
Ø 79.0	3-1/8"	12	0730079	0731079
Ø 80.0		12	0730080	
Ø 81.0	3-3/16"	12	0730081	0731081
Ø 82.0		12	0730082	
Ø 83.0	3-1/4"	12	0730083	0731083
Ø 84.0	3-5/16"	12	0730084	0731084
Ø 85.0		12	0730085	
Ø 86.0	3-3/8"	14	0730086	0731086
Ø 87.0	3-7/16"	14	0730087	0731087
Ø 88.0		14	0730088	
Ø 89.0	3-1/2"	14	0730089	0731089
Ø 90.0	3-9/16"	14	0730090	0731090
Ø 91.0		14	0730091	
Ø 92.0	3-5/8"	14	0730092	0731092
Ø 93.0		14	0730093	
Ø 94.0	3-11/16"	14	0730094	0731094
Ø 95.0	3-3/4"	14	0730095	0731095
Ø 96.0		14	0730096	
Ø 97.0	3-13/16"	14	0730097	0731097
Ø 98.0	3-7/8"	14	0730098	0731098
Ø 99.0		14	0730099	
Ø 100.0	3-15/16"	14	0730100	0731100
Ø 105.0	4"	14	0730105	0731105



Drilling structured sheet metals



Drilling rectangular tubes

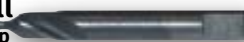


Drilling flat steels



Drilling tubes

HSS-Spare Drill with tapered center tip



from Ø 18.0 - 100.0 Ø 6x50 mm 0602650
from Ø 61.0 - 100.0 Ø 8x50 mm 0602850
(old design)

MT Arbors



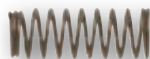
MT-2 (from Ø 37.0 mm) 0734002
MT-3 (from Ø 37.0 mm) 0734003

Weldon adaptor



from Ø 18.0 - 100.0 mm 060WD
(inc. ejector pin Prod. No. 1950500)

Spare Ejector



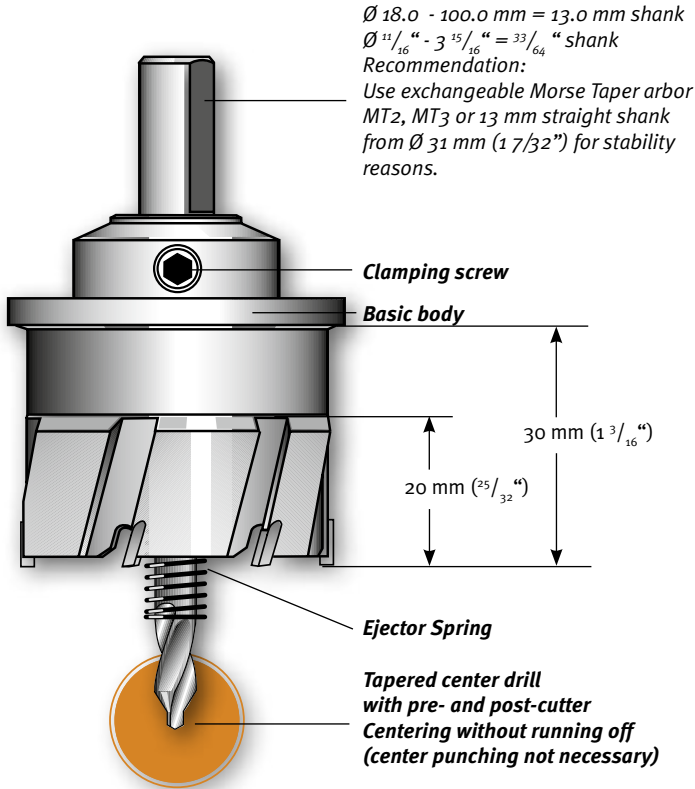
For tapered center drill
from Ø 18.0 - 100.0 mm Ø 6 mm 0732006
from Ø 61.0 - 100.0 mm Ø 8 mm 0732008

B



ALFRA TCT-HOLE SAWS – MBS-PRO

The TCT Multi-Range Hole Saw • Made in Germany by ALFRA



MBS-Multirange Hole Saws for universal use. **Max. cutting depth 20 mm (25/32")**

Suitable for flat materials but also for pipes and curved surfaces. Cutting of overlapping holes is possible. CAD optimized precision tools with high cutting performance and durability.

For use on stationary and portable drilling machines (recommended up to max. Ø 40 mm; 1 9/16")

- **Portable drilling Machines:** up to 6 mm (15/64") material thickness
- **Stationary drilling Machines:** up to 20 mm (25/32") material thickness at cutting depths from 6 mm (15/64") we recommend clearing the chips.

MBS hole saws can be resharpened, and it is possible to replace broken out teeth depending on the condition of the hole saw.

Advantages: All Alfra TCT Hole Saws MBS-Pro type are equipped with an ejector spring.

The cut material is self-ejecting. The cut material is self-ejecting.

Another special technical feature:

From Ø 31 mm (1 7/32"), we use specially hardened tool holders to compensate for the torsional power in case of heavy operation, which avoids early shearing off of the tool holder shank.

In terms of construction not comparable with any other make.

MBS – for almost limitless use

e.g., on Rotabest Magnetic Drilling Machine (with MT2 or MT3 – arbors) and Weldon adaptor Prod.-No. o6oWD on Machines with Weldon Shank.





ALFRA TCT-HOLE SAWS – MBS-PRO

The TCT Multi-Range Hole Saw • Made in Germany by ALFRA



Ø mm	Ø Inch	No. of teeth	Prod.-No. mm	Prod.-No. Inch
Ø 18.0	11/16"	6	0760018	0761018
Ø 18.6				
Ø 19.0	3/4"	6	0760019	0761019
Ø 20.0		6	0760020	
Ø 20.4				
Ø 21.0	13/16"	6	0760021	0761021
Ø 22.0		6	0760022	
Ø 22.5				
Ø 23.0	7/8"	6	0760023	0761023
Ø 24.0	15/16"	6	0760024	0761024
Ø 25.0		6	0760025	
Ø 26.0	1"	6	0760026	0761026
Ø 27.0	1-1/16"	6	0760027	0761027
Ø 28.0		6	0760028	
Ø 28.3				
Ø 29.0	1-1/8"	6	0760029	0761029
Ø 30.0	1-3/16"	6	0760030	0761030
As from Ø 31.0 mm (1 7/32") we recommend the use of MT arbors				
Ø 31.0		6	0760031	
Ø 32.0	1-1/4"	6	0760032	0761032
Ø 33.0		6	0760033	
Ø 34.0	1-5/16"	6	0760034	0761034
Ø 35.0	1-3/8"	6	0760035	0761035
Ø 36.0		6	0760036	
Ø 37.0	1-7/16"	6	0760037	0761037
Ø 38.0		6	0760038	
Ø 39.0	1-1/2"	6	0760039	0761039
Ø 40.0	1-9/16"	6	0760040	0761040
Ø 41.0		6	0760041	
Ø 42.0	1-5/8"	6	0760042	0761042
Ø 43.0	1-11/16"	6	0760043	0761043
Ø 44.0		6	0760044	
Ø 45.0	1-3/4"	6	0760045	0761045
Ø 46.0		6	0760046	
Ø 47.0	1-13/16"	6	0760047	0761047
Ø 48.0	1-7/8"	6	0760048	0761048
Ø 49.0		6	0760049	
Ø 50.0	1-15/16"	6	0760050	0761050
Ø 51.0	2"	6	0760051	0761051
Ø 52.0		6	0760052	
Ø 53.0	2-1/16"	6	0760053	0761053
Ø 54.0	2-1/8"	6	0760054	0761054
Ø 55.0		6	0760055	
Ø 56.0	2-3/16"	6	0760056	0761056
Ø 57.0	2-1/4"	6	0760057	0761057
Ø 58.0		6	0760058	
Ø 59.0	2-5/16"	6	0760059	0761059
Ø 60.0	2-3/8"	8	0760060	0761060
Ø 61.0		8	0760061	
Ø 62.0	2-7/16"	8	0760062	0761062
Ø 63.0		8	0760063	
Ø 64.0	2-1/2"	8	0760064	0761064
Ø 65.0		8	0760065	
Ø 66.0	2-9/16"	8	0760066	0761066
Ø 67.0	2-5/8"	8	0760067	0761067
Ø 68.0		8	0760068	
Ø 69.0	2-11/16"	8	0760069	0761069
Ø 70.0	2-3/4"	8	0760070	0761070
Ø 71.0		10	0760071	
Ø 72.0	2-13/16"	10	0760072	0761072
Ø 73.0	2-7/8"	10	0760076	0761073
Ø 74.0	2-15/16"	10	0760074	0761074
Ø 75.0		10	0760075	

For drilling stainless steel from Ø 76.0 mm we recommend using Rotabest AL cutters (Prod.-No. 200205....)

Ø mm	Ø Inch	No. of teeth	Prod.-No. mm	Prod.-No. Inch
Ø 76.0	3"	10	0760076	0761076
Ø 77.0		12	0760077	
Ø 78.0	3-1/16"	12	0760078	0761078
Ø 79.0	3-1/8"	12	0760079	0761079
Ø 80.0		12	0760080	
Ø 81.0	3-3/16"	12	0760081	0761081
Ø 82.0		12	0760082	
Ø 83.0	3-1/4"	12	0760083	0761083
Ø 84.0	3-5/16"	12	0760084	0761084
Ø 85.0		12	0760085	
Ø 86.0	3-3/8"	14	0760086	0761086
Ø 87.0	3-7/16"	14	0760087	0761087
Ø 88.0		14	0760088	
Ø 89.0	3-1/2"	14	0760089	0761089
Ø 90.0	3-9/16"	14	0760090	0761090
Ø 91.0		14	0760091	
Ø 92.0	3-5/8"	14	0760092	0761092
Ø 93.0		14	0760093	
Ø 94.0	3-11/16"	14	0760094	0761094
Ø 95.0	3-3/4"	14	0760095	0761095
Ø 96.0		14	0760096	
Ø 97.0	3-13/16"	14	0760097	0761097
Ø 98.0	3-7/8"	14	0760098	0761098
Ø 99.0		14	0760099	
Ø 100.0	3-15/16"	14	0760100	0761100
Ø 105.0	4"	14	0760105	0761105

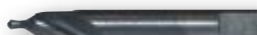


Drilling structured sheet metals



Drilling tubes

HSS-Spare Drill with tapered center tip



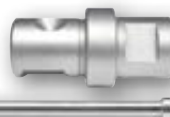
from Ø 18.0 - 100.0	Ø 6x80 mm	0732680
from Ø 61.0 - 100.0	Ø 8x80 mm	0732880
(old design)		

MT Arbors



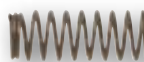
MT-2 (Ø 31.0 - 100.0 mm)	0734002
MT-3 (Ø 31.0 - 100.0 mm)	0734003

Weldon adaptor



from Ø 18.0 - 100.0 mm	060WD
(incl. ejector pin Prod. No. 1950500)	

Spare Ejector



For tapered center drill	
from Ø 15.2 - 100.0	Ø 6 mm 0762006
suitable for spare drill Ø 6 mm	



Drilling flat steels



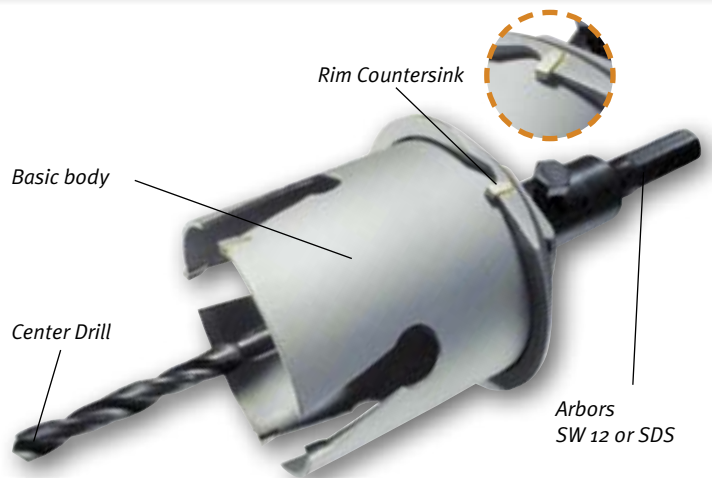
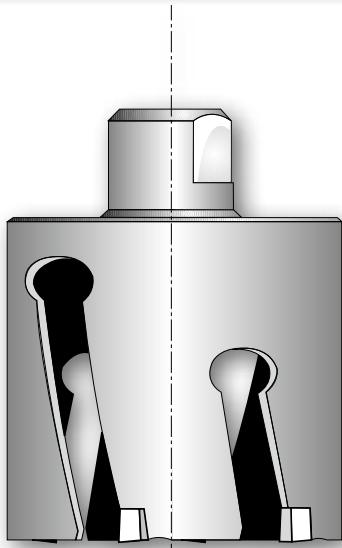
Free-hand drilling up to Ø 30 mm

B

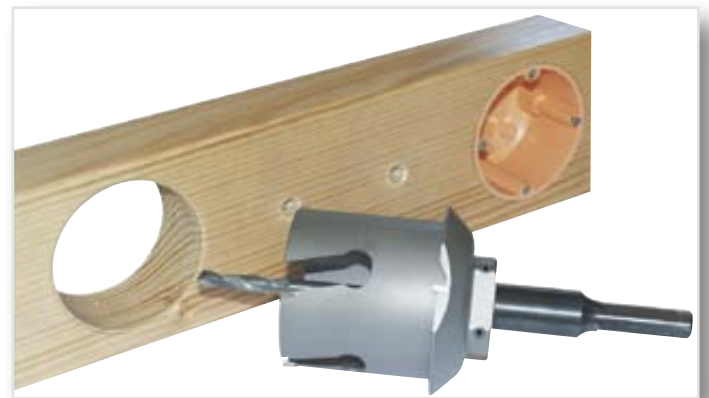


ALFRA TCT-HOLE SAWS – FRP TYPE

The TCT Multi-Range Hole Saw • Made in Germany by ALFRA



Prod.-No. 0740068060 – FRP Ø 68 mm with tool holder and rim countersink

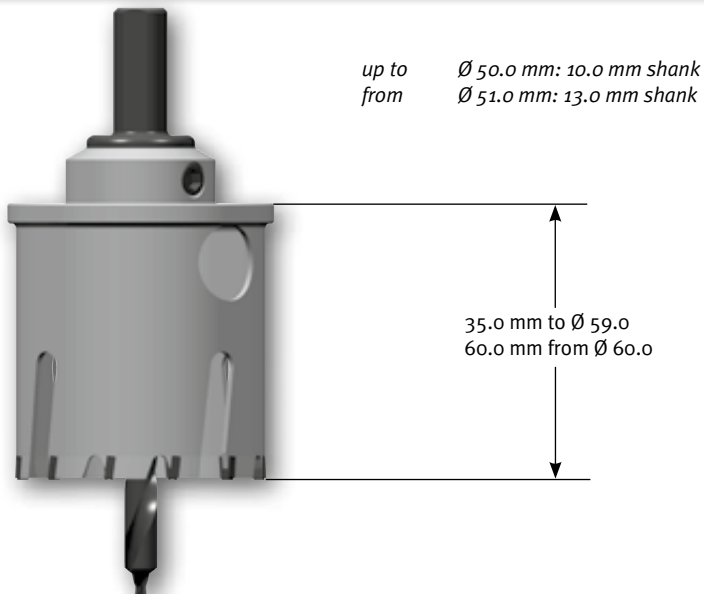


Perfect assembly of sockets in e.g. wood, gypsum plaster board,...

Cutting depth 60 mm (2 3/8")

- Specially designed for wood, plain, laminated and coated chip board, plywood, paper-base laminate, PVC, glass fibre reinforced plastic, gas concrete, Ytong stone, plasterboard, hollow gauged brick/stones.
- No blocking due to optimal cutting geometry.
- Simple drill core removal based on new chip space design.
- In the event of a tooth breaking, it can easily be replaced and re-sharpened.
- Only use when rotating, switch off hammer action.
- Ideal for electricians, plumbers and heating engineers, carpenters and cabinet makers, stair construction and kitchen furniture fitters.

ALFRA TCT-HOLE SAWS – FRP MULTI-TOOTH



with arbor shank

- Cutting depth 35.0/60.0 for sandwich-composite material, wood and chipboard coated with insulation and sheet metal (also stainless), e.g., counters and refrigerators.



Please indicate material and thickness!



ALFRA TCT-HOLE SAWS – FRP TYPE

The TCT Multi-Range Hole Saw • Made in Germany by ALFRA



Ø TCT-Hole Saws FRP			Prod.-No.	Ø TCT-Hole Saws FRP Multi-tooth			Prod.-No.
mm	inch	single drill bit, cutting depth 60 mm		mm	No series production. Delivery on request. with arbor, cutting depth 35/60 mm.		
25.0		Sanitary and heating pipes	0740025060	40.0	Sanitary drain pipes	0750040040	
25.0		Sanitary and heating pipes	0740025060	40.0	Water and heating pipes	0750045040	
35.0	1 3/8"	Sanitary and heating pipes	0740035060	50.0	with insulation	0750050040	
		Cavity wall branch box, halogen reflector lamp		55.0		0750055040	
40.0		Sanitary drain pipes	0740040060	60.0		0750060060	
45.0		Water and heating pipes	0740045060	63.0	Switch boxes, diameter 60 mm	0750063060	
50.0		with insulation	0740050060	65.0		0750065060	
55.0		Recessed lights Ø 55 mm	0740055060	68.0	socket drill	0750068060	
58.0		Recessed lights Ø 58 mm	0740058060	70.0		0750070060	
60.0		Recessed lights Ø 60 mm	0740060060	74.0	Junction boxes, diameter 70 + 74 mm	0750074060	
63.0		Switch box Ø 60 mm	0740063060	75.0		0750075060	
65.0		Cavity wall box Ø 65 mm	0740065060	80.0	Junction boxes	0750080060	
68.0		Cavity wall box Ø 68 mm	0740068060	85.0		0750085060	
70.0		Cavity wall branch boxes Ø 70 mm	0740070060	90.0		0750090060	
74.0		Cavity wall branch box Ø 74 mm	0740074060	95.0		0750095060	
				100.0		0750100060	
80.0		Junction boxes, cable gland covers, Recessed lights Ø 80 mm	0740080060	105.0	Discharge air pipes	0750105060	
					Intermediate sizes and other cutting depths on request	0759	
85.0		Recessed lights Ø 85 mm	0740085060				
90.0		Recessed lights Ø 90 mm	0740090060				
105.0		Discharge air pipes	0740105060				

HSS spare drill for FRP Multi-tooth

Ø 30.0 - 59.0 mm = 8 x 80	0752880
Ø 61.0 - 105.0 mm = 8 x 100	0752800



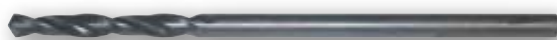
Rim countersink for Ø 68 mm 0741068000



Tool Holder wrench size 12 0742000001



Tool Holder SDS 0742000002



Spare center drill HSS 7.2 mm 0742000003



Prod.-No. 0743000001



Prod.-No. 0743000002

FRP Hole Saw Set Electrician

Content:	0743000001
1 each of Ø 35/ 68/74	
1 Tool Holder wrench size 12	
1 HSS drill	

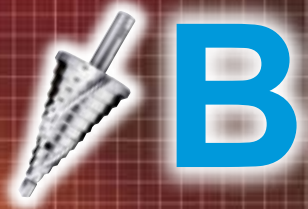
FRP Hole Saw Set Lighting

Content:	0743000002
1 each of Ø 35/60/68/80/85 mm	
1 Tool Holder wrench size 12	
1 HSS drill	

ALFRA-PRECISION MULTI-STEP DRILLS

- ▶ SPIRAL GROOVED, EACH STEP WITH AXIAL AND RADIAL RELIEF GRINDING ACCORDING TO ITS DIAMETER
- ▶ LASER-ETCHED SCALE IN THE CHIP SPACE
- ▶ SPECIAL DRILL TIP ENABLES CENTERING AND DRILLING EVEN THROUGH THIN-WALLED MATERIALS
- ▶ BURR-FREE DRILLING WITH NO DEFORMATION OF THE SHEET
- ▶ REGRINDABLE
- ▶ AVAILABLE IN HSS AND HSS WITH TiAlN COATING





MULTI-STEP DRILLS – HSS DM 05

More precise hole diameter through cylindrical steps. Hole deburring through the next step.



Application area:

The ideal tool for sheet metal forming, for the electrical industry, HVAC or the common engineering or the switchboard industry.

Suitable for all materials such as nonferrous metals, stainless steel sheets, thermoplastic and thermosetting plastics, as well as for steel sheets up to a max. material thickness of 6 mm.

With the Multi-Step Drills, sheet metals can be centered, drilled and subsequently deburred in one work step.

- A break of the drill tip mostly occurs through high feed forces at the start of the drilling operation. Multi-step drills with fixed drill tips are worthless then. A broken center drill in an ALFRA multi-step drill can be easily replaced. This more than compensates for the higher price.
- Each stage is equipped with a radially adjusted relief grinding corresponding to its diameter.
- Each stage is provided with an axial relief grinding and a relief angle on its cutting edge.
- All step diameters are laser marked on the tool.

Benefits of multi-step drills with keyway and 3 cutting edges:

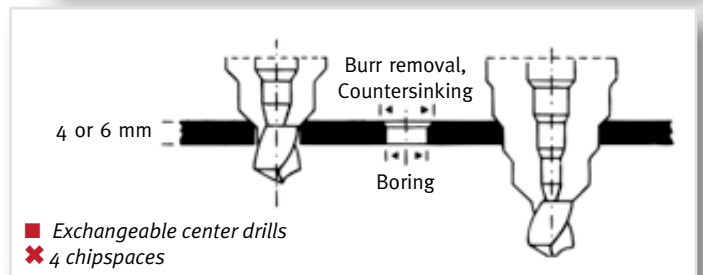
- The keyway allows the drill to make a chipping cut during drilling for better chip removal.
- The special keyway geometry, arranged around the drill, makes for a longer cutting edge compared to the usual straight groove and noticeably easier cutting.
- Spiral cut chip spaces guarantee an absolute running smoothness and a high cutting capacity.

Tip:

The tool life can be considerably prolonged by using of ALFRA Cutting Spray or ALFRA Coolant Stick.

Advantages of TiAlN hard coating:

- Suitable for use on very hard materials (VA).
- Offers optimal tool life with the same use at the highest cutting speeds.
- Very high microhardness HV 0.05 of 3200 – so that the blue-black hard coating is more than 20% harder than conventional gold-yellow TIN coating.
- Maximum working temperature: 800°C.



Description	Shank Ø	Prod.-No.
AMS	10.0	08080

For general machine construction, drills circular holes in metals up to 4 mm thick, through application with hand drills, indispensable on the work-site.
3 chip spaces, spiral grooved, replaceable center drill
Steps Ø 9 - 12 - 15 - 18 - 21 - 24 - 27 - 30 - 33 - 36 mm
(Step "40" is for deburring)

AMS – TiAlN coated	10.0	08081
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3 chip spaces, spiral grooved, replaceable center drill
TiAlN coated
Steps Ø 9 - 12 - 15 - 18 - 21 - 24 - 27 - 30 - 33 - 36 mm
(Step "40" is for deburring)

AM 1	12.0	08002
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Steps Ø 25 - 28 - 31 - 34 - 37 - 40 - 43 - 46 - 49 - 52 - 55 - 58 mm

PVD	10.0	08003
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For the electrical industry, matched to holes for armoured conduit thread clearance holes, saves considerable time when producing borings for PG
Steps Ø PG 7 - PG 9 - PG 11 - PG 13 - PG 16 - PG 21 - 33 mm - PG 29 - 40 mm



Prod.-No. 08080 ■



Prod.-No. 08081 ■



Prod.-No. 08002 ■ ✖



Prod.-No. 08003 ■ ✖



MULTI-STEP DRILLS – HSS DM 05

More precise hole diameter through cylindrical steps. Hole deburring through the next step.

Description	Shank Ø	Prod.-No.
PVD-TiN-coated	10.0	08004
PVK Like PVD, but for armoured conduit thread core hole PG Steps Ø PG 7 - PG 9 - PG 11 - PG 13 - PG 16 - PG 21	10.0	08005
SVB Pre-drill specifically for punches & dies Steps Ø 8.5 - 11.5 - 12.5 - 16.5 - 21.0	10.0	08016
DKS 32 3 chip spaces, spiral grooved, replaceable center drill Clearance holes Ø 12.5 - 16.5 - 20.5 - 25.5 - 32.5 Core holes Ø 10.5 - 14.5 - 18.5 - 23.5 - M12 - M16 - M20 - M25 - M32	12.0	08082
DKS 32 TiAlN coated 3 chip spaces, spiral grooved, replaceable center drill Clearance holes Ø 12.5 - 16.5 - 20.5 - 25.5 - 32.5 Core holes Ø 10.5 - 14.5 - 18.5 - 23.5 - M12 - M16 - M20 - M25 - M32	12.0	08083
DKS 40 3 chip spaces, spiral grooved, replaceable center drill, for metric borings acc. to EN, Core - and clearance holes M 10 - M 40 Steps Ø 10.5 - 12.5 - 14.5 - 16.5 - 18.5 - 20.5 - 25.5 - 32.5 - 38.5 - 40.5	10.0	08084
DKS 40 – TiAlN coated 3 chip spaces, spiral grooved, replaceable center drill For metric borings acc. to EN 50262 Core - and clearance holes M 10 - M 40 Steps Ø 10.5 - 12.5 - 14.5 - 16.5 - 18.5 - 20.5 - 23.5 - 25.5 - 32.5 - 38.5 - 40.5	10.0	08085
DKI-VA 4 chip spaces, replaceable center drill of HSS-Co 5 steel. For stainless steel to 3 mm thick Core - and clearance holes M 10 - M 40 Steps Ø 10.5 - 12.5 - 14.5 - 16.5 - 18.5 - 20.5 - 23.5 - 25.5 - 32.5 - 38.5 - 40.5	10.0	08032
Spare center drill suitable for AMS – PVD – PVK – DKI – DKS		08007
Spare center drill TiAlN suitable for AMS – PVD – PVK – DKI – DKS		08008



Prod.-No. 08004 ■ ✗



Prod.-No. 08005 ■ ✗



Prod.-No. 08016

Pre-drill specifically
for punches & dies



Prod.-No. 08082 ■



Prod.-No. 08083 ■



Prod.-No. 08084 ■



Prod.-No. 08085 ■



Prod.-No. 08032 ■ ✗



Prod.-No. 08007



Prod.-No. 08008

■ Replaceable center drill ✗ 6 With 4 chip spaces





MULTI-STEP DRILLS – HSS DM 05

More precise hole diameter through cylindrical steps. Hole deburring through the next step.

Standard execution with 2 chip spaces, spiral grooved.

- More precise hole diameter through cylindrical steps.
- Immediate deburring through the next step
- Drilling of sheet metals as thin as 4 mm possible.
- Use coolant stick!
- The keyway allows the drill to make a chipping cut during drilling for better chip removal.
- Longer cutting edge compared to the usual straight groove and noticeably easier cutting.
- Laser-etched scale in the chip space to indicate the bore diameter achieved.

Description	Bore range	Shank Ø	Length	Prod.-No.
AM-12	4 - 12 mm x 1 mm	6.0	70 mm	08070
AM-20	4 - 20 mm x 2 mm	9.0	77 mm	08071
AM-30	6 - 30 mm x 2 mm	10.0	98 mm	08072

Set in plastic case 08073

Contents:

1 of each Type AM-12/AM-20/AM-30

High-performance coolant stick 09011



Prod.-No. 08072

Prod.-No. 09011

Standard values for the use of ALFRA Multi-step drills

This drill was developed to bore perfectly round and deburred holes in sheet metal from 4 - 6 mm thick. The transition forms a radius which serves to deburr or bevel the hole at the same time. While conical one-lip bits drill a slightly tapered hole, our ALFRA multi-step drill achieves a cylindrical hole. The tools have axial-radial relief grindings and can be lightly reground on the breast of the cutting tooth.

We recommend the use of pillar drilling machines, however, the small ALFRA Multi-step drills can be used on adjustable hand drilling machines. Sufficient cooling using ALFRA coolant stick or a bore emulsion is imperative.

Speed chart rpm

Type		sheet steel St37	stainless steel sheets	non-ferrous metals	plastics (soft)
AM	drill	800	360	1000	1000
	countersink	500 - 180	50 - 70	800 - 400	1000 - 400
AM-1	drill	800	360	1000	1000
	countersink	200 - 100	100 - 50	500 - 200	600 - 250
PVD+PVK+DKI	drill	800	360	1000	1000
	PVD-VA + SVB	countersink	400 - 200	200 - 100	800 - 500



Prod.-No. 08073



PRECISION CONICAL ONE-LIP BITS – HSS DM 05

With laser-marking

ALFRA Precision Conical One-Lip Bits are the ideal tools for general sheet metal working. Fields of applications include HVAC, electronic industries, engineering and panel building.

To be used on non-ferrous metals, stainless steels, thermo- and duroplastic plastics, as well as on all common sheet steels up to a material thickness of max. 4 mm. With ALFRA Conical One-Lip Bits, you can center, spot drill and bore up in one work step.

If treated carefully, can be reground many times.

The tool life can considerably be prolonged by using ALFRA Cutting Oil or Coolant Stick.

Packing: separately in plastic box with operation manual.

Size	Range	Shank-Ø	Prod.-No.
1	3.0 - 14.0	6.0	09001
2	6.0 - 20.0	8.0	09002
3	16.0 - 30.5	10.0	09003
4	26.0 - 40.0	12.0	09004
5	35.0 - 50.0	12.0	09005
6	46.0 - 60.0	13.0	09006
7 L	4.0 - 30.5	10.0	09007
8*	6.0 - 22.5	8.0	09008
Set 1	Size. 1 + 2 + 3 + Stiff		09009
Coolant stick, separately			09011

*Special Antenna-Bit

- Conical one-lip bit with cylindrical end section to drill holes for car antennas.
- Burr-free, no deformation, no countersinking, dimensional accuracy
- Size 6,0 - 22,5 mm.

Precision Conical One-Lip Bit Set

Tin box **Prod.-No. 09009**

Contents:

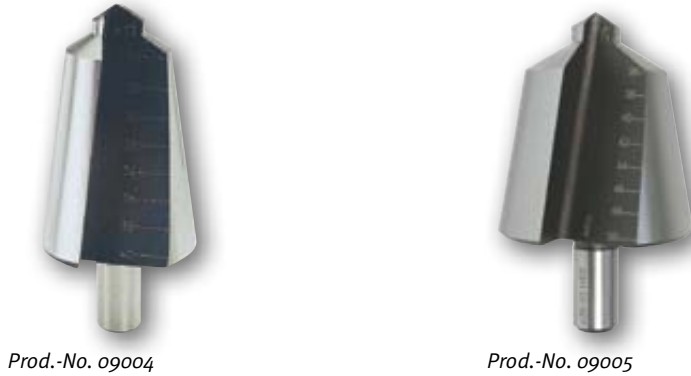
- 1 x Size 1
- 1 x Size 2
- 1 x Size 3



Prod.-No. 09001

Prod.-No. 09002

Prod.-No. 09003



Prod.-No. 09004

Prod.-No. 09005



Prod.-No. 09006

Prod.-No. 09007

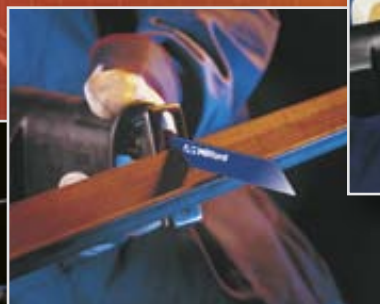
Prod.-No. 09008*



Prod.-No. 09009

ALFRA - SABRE SAW BLADES

FOR PROFESSIONALS





ORIGINAL ASTROFLEX® – Sabre Saw Blades

For Rockwell, Makita, Black & Decker, Bosch, Holz-Her, Atlas Copco, Rems, Roller, Milwaukee, Hilti and others.

- A new range of sabre saw blades with improved cutting performance and precision ground teeth. **Cobalt** alloyed teeth.
- The HSS-Bi-Metal blade is almost unbreakable and suitable for all materials and applications.
- This sabre saw blade stands for **highest quality** and **durability**.

For Metal



Application Range	Material thickness in mm	Steel-Quality	Length	Width	Thickness	Teeth inch	Milford Prod.-No.	Alfra Prod.-No.
Metal processing Metal processing; soft metals copper-, aluminium-, brass-cables, wires and pipes	> 3 mm	HSS-Bi	100 mm	16 mm	0.9 mm	14	88161	30255
Metal processing; soft metals copper-, aluminium-, brass-cables, wires and pipes	> 1 mm	HSS-Bi	100 mm	16 mm	0.9 mm	18	88162	30256
All kind of metals, stainless steel steel pipes, cast iron, alloys, etc.	> 3 mm	HSS-Bi	150 mm	16 mm	0.9 mm	14	88177	30259
All kind of metals, stainless steel steel pipes, cast iron, alloys, etc.	> 1 mm	HSS-Bi	150 mm	16 mm	0.9 mm	18	88178	30260
All kind of metals, stainless steel steel pipes, cast iron, alloys, etc.	3-6 mm	HSS-Bi	150 mm	16 mm	0.9 mm	10/14 Combo	88216	30262
All kind of metals, stainless steel steel pipes, cast iron, alloys, etc.	> 6 mm	HSS-Bi	200 mm	16 mm	0.9 mm	10	88174	30263
All kind of metals, stainless steel steel pipes, cast iron, alloys, etc.	> 3 mm	HSS-Bi	200 mm	16 mm	0.9 mm	14	88186	30264
All kind of metals, stainless steel steel pipes, cast iron, alloys, etc.	> 1.15 mm	HSS-Bi	200 mm	16 mm	0.9 mm	18	88187	30265
All kind of metals, stainless steel steel pipes, cast iron, alloys, etc.	3-6 mm	HSS-Bi	200 mm	16 mm	0.9 mm	10/14 Combo	88217	30266
Special Sabre Saw Blade flexible type for cast iron- and steel pipes	3-10 mm	HSS-Bi	290 mm	16 mm	0.9 mm	10/14 Combo	88218	30272

For Wood



Special Sabre Saw Blade for Wood with nails, especially for the refurbishing		HSS-Bi	150 mm	19 mm	0.9 mm	6	88142	30385
Special Sabre Saw Blade for Wood - curved cuts -		HSS-Bi	150 mm	19 mm	0.9 mm	4/6 Combo	88143	30386
Special Sabre Saw Blade for Wood - Refurbishing -		HSS-Bi	210 mm	19 mm	0.9 mm	6	88144	30387
Special Sabre Saw Blade for Wood - Refurbishing -		HSS-Bi	290 mm	19 mm	0.9 mm	6	88145	30388



ORIGINAL ASTROFLEX® – HSS-Bi-Metal Sabre Saw Blades



For Rems- and Roller Sabre Sawing Machines

ALFRA-Special-Sabre-Saw Blades can be used problem-free on these machines. Made of HSS-Bi-Metal, heat treated to the point.

- Made of high alloy HSS-Bi-Metal
- Heat treated to the point
- Highest heat hardness and wear resistance
- Tothing in crossed version

For pipes



Application range	Steel quality	Length	Width	Thickness	Teeth per inch	Blade No.	Alfra Prod.- No.
Pipes up to Ø 2"	HSS-Bi-Metal	140 mm	25 mm	1.6 mm	8	88140-8	30089
Pipes up to Ø 4"	HSS-Bi-Metal	200 mm	25 mm	1.6 mm	8	88200-8	30092

for free-hand and flush cutting



For free-hand and flush cutting	HSS-Bi-Metal	150 mm	25 mm	1.1 mm	14		30105
	HSS-Bi-Metal	200 mm	25 mm	1.1 mm	14		30103
e. g. refurbishing, on walls and overhead	HSS-Bi-Metal	300 mm	25 mm	1.1 mm	14		30104

Packaging unit: 5 pieces

ALFRA – Jigsaw Blades

Suitable for pneumatic saws as e. g. SIG and Flex-sheet Metal-Tiger Saws

Made of HSS Bi-Metal for burr- and distortion-free cutting of thin sheet metals and plates, as well as for pipes in ventilation and air condition constructions. Precise crossing, highest endurance.



Prod.-No. 31014 - 31017



Prod.-No. 31018 - 31021

Application range	Length mm	Thickness mm	Width mm	Teeth inch	Prod.-No.
For sheet metals as from 1,1 mm thickness, plastic up to 3 mm, wood up to 5 mm	96	0,6	12,5	14	}
	96	0,6	12,5	18	
For sheet metals 0.7 - 1.1 mm thickness	96	0,6	12,5	24	31016
For sheet metals up to 0.7 mm thickness	96	0,6	12,5	32	31017
For sheet metals as from 1.1 mm thickness, plastic up to 3 mm, wood up to 5 mm	97	0,6	12,5	14	}
	97	0,6	12,5	18	
For sheet metals 0.7 - 1.1 mm thickness	97	0,6	12,5	24	31020
For sheet metals up to 0.7 mm thickness	97	0,6	12,5	32	31021

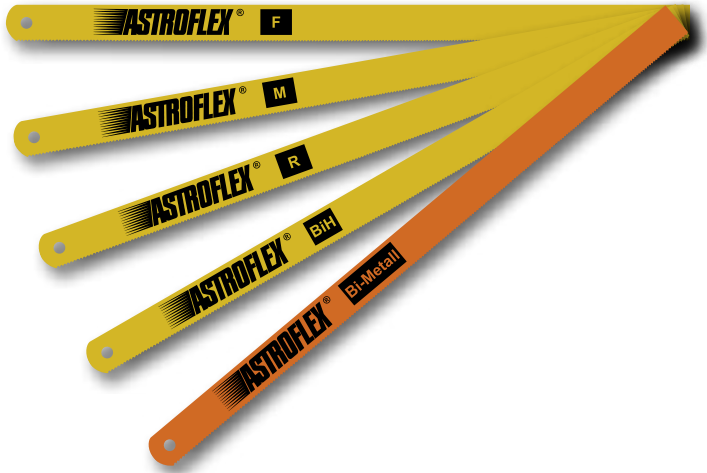
Attention: do not use any pressure, feed only with dead weight of machine.



Metal Hacksaw Blades

Types

- Type F Flexible, economical carbon steel blade.
- Type M Universally usable, partially heat treated HSS blade.
- Type R Full-hardened blade for precise, guided cuts, made from HSS steel with high Cobalt content.
- Type BiH Blade with hardened tooth tips, therefore semi-flexible with high hardness made from HSS steel with high Cobalt content
- Type Bi-Metal "Unbreakable" – made from HSS Bi-metal, for flexible, robust application.



Type	No. of teeth/Inch		Prod.-No.
Typ F	18 Z	Wavy Set	3300F18
Typ F	24 Z	Wavy Set	3300F24
Typ F	32 Z	Wavy Set	3300F32
Typ M	18 Z	Raker Set	3300M18
Typ M	24 Z	Raker Set	3300M24
Typ M	32 Z	Wavy Set	3300M32
Typ R	18 Z	Raker Set	3300R18
Typ R	24 Z	Raker Set	3300R24
Typ R	32 Z	Wavy Set	3300R32
Typ BiH	18 Z	Raker Set	3300BiH18
Typ BiH	24 Z	Raker Set	3300BiH24
Typ BiH	32 Z	Wavy Set	3300BiH32
Typ Bi-Metall	18 Z	Raker Set	3300BiM18
Typ Bi-Metall	24 Z	Raker Set	3300BiM24
HSS-Bi-Metal	32 Z	Wavy Set	3300BiM32

- Customer brand execution in colour, imprint and packaging from 15,000 pieces possible
- Packaging unit: 100 pieces

MACHINE SAW BLADES – HSS DM 05

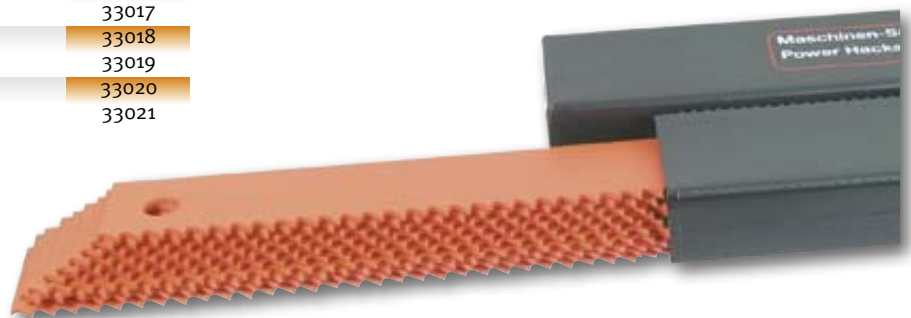
For Hacksawing machines

- You can use the efficiency of the whole machine with these machine saw blades.
- For sawing solid material, pipes and profiles of all strengths.
- **Also for high-strength steels**
- With parabolic tooth against early break
- Sharp-edged and wear-resistant, with fine carbide repartition in micro structure
- Straightened by master hand
- For all types of machines



Dimension mm	available toothings tpt	Prod.-No.
300 x 25 x 1.5	8 10 14	33010
350 x 30 x 1.5	6 8 10 14	33011
350 x 30 x 2.0	4 6 8 10	33012
400 x 30 x 1.5	6 8 10 14 18	33013
400 x 30 x 2.0	4 6 8 10	33014
450 x 30 x 2.0	4 6 8 10	33015
450 x 35 x 2.0	4 6 8 10	33016
450 x 40 x 2.0K	4 6 8 10	33017
500 x 40 x 2.0	4 6 8 10	33018
575 x 50 x 2.5K	3 4 6	33019
650 x 55 x 2.5K	3 4 6	33020
700 x 55 x 2.5K	3 4 6	33021

Prod.-No. 33...
 K = Kasto with displaced side holes
 Other dimensions and toothings on request.
 Length measured from hole center to center.
 Packaging unit: 10 pieces





B



COOLANT – Cutting, Drilling, Broaching Oils

RIXOL-2000

Coolant concentrate

- Universal use for sawing and drilling of steel, stainless steel, cast iron, nonferrous metal and aluminium alloys.
- Water emulssive, contains mineral oil, rot-proof, stable solution.
- Provides good rust protection and lubrication. Causes no irritation of the skin.
- No smoke development and no coagulation.
- Factor I for hand refranctometer.
- Mixture: Cutters 8 - 10%, Circular saws 5 - 12%, Band saws 6 - 20 %

	Prod.-No.
10 kg plastic container	21002

ALFRA BIO 2000

High performance cutting oil, biologically degradable

- ALFRA BIO 2000 is an entirely synthetic cutting oil, developed for the metal working industry for core drilling, turning, drilling, milling, reaming, countersink, rubbing, tapping
- Ideally qualified for all steel and steel alloys, chrome-nickel steel, copper, aluminium alloys.
- ALFRA BIO 2000 doesn't contain any hydrocarbon and is chlorine free.
- With special high pressure and anti wear additives.
- With corrosion and rust protection.
- Increases tool life up to 200 % and shortens operating time, reduces the number of rejects.
- Biologically degradable according to the EU standard: CEC L-33-T-94

	Prod.-No.
Can 405 ml	21010
5 kg plastic container	21012
60 kg drum	21021

ALFRA 3000

High performance Cutting Oil Spray

- For the most difficult working procedures like core drilling, drilling, turning, tapping, reaming, countersink, rubbing
- With special high pressure and anti wear additives.
- For usage of high alloyed stainless steel, chrome-nickel steel and its alloys, titanium and manganese carbon steel.
- Qualified for non-ferrous- and light metals.
- Increases tool life up to 200 %, shortens operating time. Reduces the number of rejects.
- Sticks on surfaces, therefore it's qualified for "over head works" on walls and ceilings.

	Prod.-No.
Can 520 ml	21030
5 kg plastic container	21031
60 kg drum	21032



Prod.-No. 21002



Excellent for use with Rotabest®-Metal Core Drilling Machines, because they are water soluble.



Prod.-No. 21010



Prod.-No. 21030