











FULL LINE CATALOGUE 2010/2011

Electrical connection systems
Tools and measuring instruments







Dear customer,

A very warm welcome to the new Klauke Catalogue. A catalogue very much dedicated to the "Generation Safety Plus". The new generation of hydraulic crimping and cutting tools combines proved and tested Klauke technologies and benefits with even more intelligence, performance and ergonomics. Everything needed to work with our tools even safer and facilitating easy operation.

In addition we are extending our range with professional crimping tools for plug connection systems in the photovoltaic sector and special ergonomic tools for processing cable end sleeves. All this emphasises also this year our company's innovative strength. Within the Greenlee range the next generation of battery-powered hydraulic punching tools, MagnumPro fish tapes and innovative voltage testers, multimeters and VDE testers is available. All new developments with specific product benefits and advantages for the user.

The product range:



Electrical connection systems, crimping, cutting and hand tools



GREENLEE. Punching and processing tools, cable pulling technology, testing, measuring and inspection equipment

Connections with a system - the Power of Partnership: our philosophy to connect man and technology in a unique way which in addition creates the basis for a one-of-a-kind relationship between you and ourselves.

Yours sincerely Klauke Team

Klauke stands for permanent development and constant product improvement.

Generation Safety Plus

Hydraulic crimping tools



- Intelligent Pressing System IPS
- Integrated pressure sensor, evaluation function via USB adapter
- Powerful 18 V Li-Ion battery

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Hydraulic cutting tools



- Robust and lightweight cutting heads
- Cutting range up to Ø 105 mm, also for armoured cables
- Manual retraction stop MRS

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Hydraulic universal tools



- One tool for cutting, crimping and
- Also as 12-ton version: EK 120 UNV-L
- Time saving by MRS+ function

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Crimping dies series 5



- For 5 ton crimping tool EK 50/5-L
- Crimping dies with double profile
- Crimping range up to 240 mm² (Cu)

More from page 397

Hydraulic crimping heads



Hydraulic cutting heads



- ▶ Up to Ø 120 mm depending on design
- Models for fine-stranded conductors, steelarmored cables and Al/St cables (ACSR)
- Up to 40% lighter than previous models

More from page 352



Success tells its own tale and our innovations always create greater benefits for our customers. Work becomes even more efficient. Electrical connections even get safer.

Mechanical crimping tools OSUBLE SET OF THE SET OF THE















Electrical connection system

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- Copper tubular cable lugs and connectors
- Stainless steel and nickel tubular cable lugs and connectors
- Copper compression cable lugs and connectors to DIN
- Copper solderless terminals, connectors & pin cable lugs to DIN
- Copper sleeves for compacted conductors and sector shaped conductors
- Aluminium compression cable lugs and connectors to DIN
- Aluminium/copper compression cable lugs and connectors
- Clamps and screw connectors
- Cable end sleeves
- Cable connections, insulated and non insulated
- Assortments

Crimping dies

386

- Series 50
- Series 4
- Series 5
- Series 18
- Series 22
- Series 13
- Series 25 ■ Series 45

Holemaking tools

496

- Round and special shape punches
- Punch drivers and sets
- Hole saws
- Bits and step bits

Welcome!

■ What's new

- Solutions for installers, trade and industry
- Our tradition of innovations
- Demanding more than standards
- Anything is possible
- Here you are in good hands
- More than just maintenance
- Klauke always close by
- For secure connections worldwide



Crimping and cutting tools

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- Mechanical crimping and cutting tools
- Electric and pneumatic crimping tools
- Hand-operated hydraulic crimping, cutting and universal tools
- Battery-operated crimping, cutting and universal tools
- Hydraulic crimping, cutting and universal heads
- Hydraulic drive units
- Hydraulic systems
- Accessories for hydraulic tools
- Force and pressure gauge systems



Hand tools

426

- VDE tools
- Standard tools
- Wire stripping tools
- Stripping tools
- Tools for communications technology



Production tools

552

- Special cutting tools
- Machining tools for bus bars
- Pumps and accessories



Cable pulling technology

564

- Fish tapes
- Cable puller
- Pulling grips



Testing and measuring instruments

578

- Voltage testers
- Digital multimeters
- Locators
- Clamp meters
- VDE testing instruments
- Cable and conductor identifiers

■ Temperature gauges

■ Network measuring devices and

testers

Technical Appendix

- Notes on the various crimping profiles ■ Legend for pictograms used
- Conversion charts
- Standards, changes, improvements

- Service check list as master copy
- Order form as master copy
- Alphabetical Index
- Alphanumerical Index

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Safety Plus – a Generation with added value.

From advanced technology, get more out of it -

Generation Safety Plus.

Klauke electro-hydraulic crimping and cutting tools are always the most convenient and powerful solution when it concerns reliable crimping of connection material and cutting. However, previous achievements do not mean we should rest on our laurels. On the contrary, we will be working continuously for improvement.

The result: our new tool generation - Safety Plus.

The successful and established Klauke® mini-Series and the new Klauke® mini+, ultra and ultra+ series set standards for crimping and cutting tools as regards intelligence, performance and ergonomic and thus make electrical connection systems more secure than ever.



More intelligence.

- Integrated pressure measurement with visual and audible signals in case of failure.
- ▶ Evaluation function using optical interface and USB adapter.
- Light diode for maintenance control, charge level indicator and data transmission to the PC.
- Automatic retract stop (ARS) for positioning control in case of multiple crimps.



Higher performance.

- High-performance Li-lon batteries with high capacity and extremely short charging time.
- ▶ High-performance motors for maximum operating speed.
- ▶ Energy saving function by stopping motor.
- Mains adapter NG2 for mains operation.

More ergonomic.

- ▶ Grip through to 2-component housing.
- Optimised centre of gravity.
- ▶ One-button-operating concept for easy handling.
- ▶ High-performance LED for work area illumination.



The most powerful Mini ever seen.

EK 50/5-L

The new 5-ton tool class.

The Klauke® mini+ is the clear evidence of the fact that small dimensions and lightweight do not necessarily associate with low performance. Its ergonomic design enables simple handling. It outshines most of the large series due to its high-performance engine, new 18 V Li-lon batteries and also the automatic feedback for crimping process. All ideal conditions – so that each work step becomes easy – even in tight areas.







Characteristics:

- Crimping area up to 240 mm² (Cu)/185 mm² (Al).
- Electronic control and monitoring of crimping operation.
- Integrated pressure measurement with visual and audible signals in case of failure.
- ▶ Evaluation function using optical interface and USB adapter.
- ▶ 18 V/1.3 Ah Li-Ion battery.
- ▶ With LED for workplace illumination.

Crimping dies of series 5.











Cutting made easy up to Ø 120 mm.

The new hydraulic cutting tools.

The latest generation of our hydraulic cutting tools distinguishes itself through function and performance. New features enable the working with it safer and easier.

The 18 V Li-Ion batteries of the battery-powered hydraulic tools feature 50 % more energy than the conventional NiMH batteries.

The ultra+ models with 120 kN cutting force are available with both open and closed head and cut armored cables of diameters up to 105 mm.

Retraction can be interrupted at any position using the manual retract stop (MRS) – this

saves time and energy.

The extremely robust cutting heads are distinguished primarily thanks to their lightweight. The new heads are up to 40 % lighter than the previous models.



Characteristics:

- For Al/St ropes (ACSR) of up to Ø 55 mm.
- ▶ For multiple and fine stranded cables and conductors up to Ø 120 mm.
- ▶ Closed cutting heads with innovative bolt interlock.
- Manual retract stop (MRS) for efficient operations.

Efficiency for the cable harness assembly.

The workbench-mounted tool with 120 kN crimping force: **THK 120**

The range of hydraulic crimping tools for workbench mounting has been supplemented with an additional tool: The THK 120 with 120 kN crimping force and a crimping range up to 400 mm². The processing time is clearly reduced through wide crimping using dies from Klauke 13-series as compared to 6-ton tools, in particular in case of large nominal cross sections.

Characteristics:

- ▶ For 13-series interchangeable dies, wide crimping.
- Quick action coupling.
- ▶ For connecting to hydraulic drive units with 700 bar operating pressure for best possible crimping results.





Ideal for box terminals and spring clamp technology.

The cable end-sleeves specialist:

K38 ERGO

In constricted places, the crimping of cable end-sleeves proves to be extraordinarily tricky. This is where the new mechanical crimping tool K38 ERGO can help.



Thanks to its pistol form and slim crimping head, cable end-sleeves can be crimped comfortably into tightly fitted control cabinets. The conductors can be inserted comfortably from the front. The ergonomic design allows extraordinarily easy handling.

The tool inclusive of practical plastic case and a range of insulated cable end-sleeves is available as K38 ERGO set.

Characteristics:

- Square crimping ideal for box terminals and spring clamp technology.
- ▶ Crimping range from 0.25 mm² up to 6 mm².
- Easy operation with minimum effort.
- Ergonomic design.

Highest precision for photovoltaic.

Crimping tools for Multi-Contact plug-in systems:

K90 MC3 / K90 MC4

Especially for the photovoltaic sector, the range is added to Klauke K90 MC tool series for the Multi-Contact plug-in systems MC3 and MC4.

The tools with simultaneous die movement ensure maximum level of precision. The crimping head KP 90 MC31 can be combined with all basic tools of Klauke Pro-Series.



Characteristics:

- Crimping profiles for Multi-Contact plug-in systems.
- ▶ High precision by linear closing dies.
- Ergonomic design with optimum force transmission.





Safe installation tests for every application.

The new multi-testers of G GREENLEE.



The new ETest-Series for safe installation tests. With the help of these devices you make sure that electronic installations comply with all requirements according to VDE 0100.

ETest Multi and ETest Riso have a cordless probe, thanks to which you can use your hand freely to hold the tester so that you can test and simultaneously read the results.

Characteristics:

- The ETest Multi is a VDE 0100 tester, which can be used for continuity tests, voltage and insulation resistance measurements (100 V, 250 V, 500 V) as well as for line and earth loop impedance measurements.
- The earth resistance measuring device ETest RE is suitable for 110 V and 230 V installations as well as for electrical three-phase systems.
- The ETest RISO meets the requirements for insulation resistance measurements and continuity measurements. The device is compatible with the EN 61577 und IEC 61010-1600 V Cat. III standards.





The new voltage tester and multimeter GT-16 and DM-210A

The non-contact voltage tester GT-16 detects voltages between 5 and 1000 V AC. Due to the compact size, the device fits in every shirt pocket or in the tool belt. An acoustic signal and LED are immediately displayed when voltage is applied.



The new generation of multimeters is provided with several new features. Thanks to the enlarged and illuminated displays, the devices can be read properly in dark as well. Voltage can also be detected without contact. The respective models have a variety of measuring functions - partly even with temperature measurement. The measurement results can be transmitted via optical RS 232 interface or USB cable directly to a PC.



New generation also for punching tools.

Punching made easy: LS 50-L FLEX and LS 60-L



which provides highly flexible use to the user. Using the new LS 60-L Klauke replaces the LS 60. The battery-hand hydraulic punch driver is also equipped with the new Lithium ions technology. Both tools have an automatic end stop. In addition to this they have a lag stop which interrupts the rate of advance immediately after releasing the control switch. Built-in white LED illuminates the field of working aerea.



- Compact, ergonomically formed 2-component housing for optimum hold and effortless operations.
- Automatic limit stop and lag stop.

Even easier retraction thanks to improved housing.

The cable-fish tapes of the $MagnumPro^{TM}$ Series.

We have developed the fish tapes of MagnumProTM Series based on comprehensive market observations, customer discussions and scientific investigations. These fish tapes are manufactured from steel, stainless steel, nylon and fibreglass. A number of enhancements were available to increase comfort, ergonomics and durability in the housing compared to the previous ones. Lifetime and productivity have increased significantly. Moreover, the eyelets of the latest steel strips were improved – these are smaller with offset bend for improved fishing ability.



Characteristics:

- ▶ 19 models with different materials.
- ▶ Robust, beveled and shock-proof housing with comfort handle.
- Patented system for easy extension and retraction.







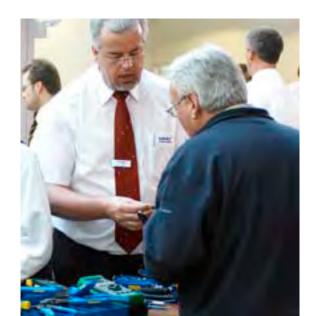
Solutions for installers, trade and industry.

Klauke, a Textron Group Company – and your partner.

We use best matched products and services to create pioneering solutions for installers, trade and industry all over the world. Both alone as Klauke, but also within the multi-industrial company Textron with Greenlee.

Through the **strategic alliance with Greenlee**, we offer complementary and matched product ranges for professional application. Together, we have at our disposal ultra-modern research and development centres in Germany, Great Britain and the United States and an **international distribution network with service centres in more than seventy countries**.

Being in constant touch with our customers, we discover ways to optimise our products. This information help to continually develop our products. The resulting safety and efficiency for all working with Klauke products is reason that craftsmen all over the world trust in Klauke.





Our tradition of innovation.

Customer requirements as basis for new developments.

We have been committed to systematically **developing innovative**, **application oriented solutions since our foundation in 1879.** To achieve this we closely work together with users. All our developments start with your requirements, ideas and preferences. Skilled and qualified labour realise these developments - from the idea through to start of production. The **system concept** pays the key role in this process: All new developments complement the existing product range and offer variable applications.

This generates innovative products that offer significantly more when it comes to operation and affordability. **Numerous awards and innovation prizes** confirm that this is the way forward.

Klauke pliers, for instance, have received the **IF-Product-Design-Award** for ergonomic and safety design. And this range is just one of the innovative product highlights which we present with this catalogue.





Demanding more than standards

Klauke for more safety and quality.

Just meeting the standard isn't enough. In terms of safety, user friendly application and robustness, all Klauke as well as Greenlee products comply with the highest specifications and **perform in excess of the standards required**. We are certified to ISO 9001. Regular internal and external audits guarantee consistently high quality. Our products comply with international approvals.

We purchase only raw materials and components that guarantee firstclass quality. And to guarantee that we work consistently with carefully chosen suppliers. Stringent inspections and quality tests at every stage of the manufacturing process **safeguard our high standards**. Klauke customers depend on it. Which is their right: We guarantee maximum safety and optimised comfort in the application of our products.

Environmental issues also play a crucial role. Our company is **Ecoprofit** ("ECOlogical PROject For Integrated Environmental Technology") certified and excels through its especially pro-environmental production.







Anything is possible.

Special manufacture for individual solutions.

Beside Klauke's expansive product range of solderless connection systems and tools, we also develop a **host of individual solutions for special applications**.

Specially-dimensioned tubular cable lugs, hooked types, with double hole, angled lugs, as well as connectors and parallel connectors **made to specification** and other designs **acc. to drawing** are possible. Made from copper or aluminium. Copper finish, tin or nickel-plated versions are available.

We also design **special tool solutions** for our industrial partners. Precisely tailored for each application. Please refer to the checklist in the Technical Appendix with details on issues required. Please refer directly to your contact person in our sales office.







Here you are in good hands.

Our sales force at your service.

As a partner to installers, trade and industry, our service - and sales - teams are close to our customers. Highly-motivated personnel offer **you every possible support**. Every year, we train thousands of installers and staff from our wholesalers and distribution partners. Apart from product presentations our main objective is to exchange ideas and experiences with our customers.

And it's not only here that we encourage dialogues: Every day our personnel answers questions on the phone or at site. Our application technology tests your electrical connections - and provides active support in the form of individual **solutions for your particular applications**. These measures are the platform from which we consistently advance and improve our products. And guarantee the safety of the electrical connections done with Klauke products.

- Product presentations and expert advice at site through our field service team.
- **Klauke Mobile** in operation for you.
- Internal and external training and seminars for customers.
- Information, **advice and workshops** at all important national and international exhibitions.
- Fast technical support for special applications from our experts.
- We test your electrical connections and provide test reports upon request.





More than just maintenance.

Services for your tool.

The Service Center in Remscheid and the worldwide authorised Service Centers (ASC) offer you reliable **technical support for our tools**. Starting with a free tool hotline for maintenance and repair service with test plates and certificates through to a hire service. We do everything we can to make sure your tools remain fully functional - or provide you with alternatives if necessary.



In addition to these services, Klauke of course provides **2 years of guarantee** on full functionality of the tools.

We provide this service all over the world. Our national and international partners' expertise and equipment always conforms to the latest standards.

- **Free Hotline** for all questions about the tool service in Germany.
- ▶ Repair and maintenance through the Service Centers.
- ▶ Complete maintenance service with annual inspection and maintenance at fixed prices, including **test plate and certificate**.
- Fast, uncomplicated tool hire service for all standard tools.
- On-site Service Mobile.





Hotline Germany +49 (0)800 / 4 68 55 28

Repair Service +49 (0)2191 / 907 - 222

Rental or Loan Service +49 (0)2191 / 907 - 221

International phone +49 (0)2191 / 907 - 322

Fax Service Center +49 (0)2191 / 907 - 243

E-mail service@klauke.textron.com

Klauke - always close by...



Gustav Klauke GmbH

Auf dem Knapp 46 D-42855 Remscheid Phone: +49 (0)2191 / 907 - 0 Fax: +49 (0)2191 / 907 - 201 info@klauke.textron.com www.klauke.com

Sales-Hotline: +49 (0)2191 / 907 - 107

Sales manager Torsten Darkow

Phone: +49 (0)2191 / 907 - 120 Fax: +49 (0)2191 / 907 - 340 Mobile: +49 (0)172 / 70 51 247 tdarkow@klauke.textron.com

Internal service manager Axel Rauch

Phone: +49 (0)2191 / 907 - 401 Fax: +49 (0)2191 / 907 - 340 Mobile: +49 (0)172 / 70 51 240 arauch@klauke.textron.com

Assistance Jasmin Schippling

Phone: +49 (0)2191 / 907 - 254 Fax: +49 (0)2191 / 907 - 340 jschippling@klauke.textron.com

NORTHERN REGION

Regional sales manager **Uwe Pilgrim**

Phone: +49 (0)521 / 78 53 - 470 +49 (0)521 / 78 53 - 471 Mobile: +49 (0)151 / 14 63 97 53 upilgrim@klauke.textron.com

Representatives

Representatives

Schleswig-Holstein, Hamburg Jens Brehmer

Küstriner Str. 10 D-25421 Pinneberg Phone: +49(0)4101/789340

+49(0)4101/780776 Fax: jens.brehmer@freenet.de

Niedersachsen East, Eastern Westphalia, Münster **Detlef Sikora GmbH**

Lägenfeldstraße 7 D-30952 Ronnenberg Phone: +49(0)511/43804-0 +49(0)511/43804-49 Fax: hannover@sikora.de

Sachsen-Anhalt **Detlef Sikora GmbH**

Industriegebiet Süd 2 D-39443 Förderstedt Phone: +49(0)39266/931-0 +49(0)39266/931-15 Fax: magdeburg@sikora.de

Sales

Niedersachsen North-West, Bremen Jochen Wordtmann

Phone: +49 (0)4486 / 920 - 612 +49 (0)4486 / 920 - 764 Fax: Mobile: +49 (0)151 / 14 63 99 43 jwordtmann@klauke.textron.com

Niedersachsen South-West, Nordrhein-Westfalen North-West **Uwe Pilgrim**

Phone: +49 (0)521 / 78 53 470 +49 (0)521 / 78 53 471 Mobile: +49 (0)151 / 14 63 97 53 upilgrim@klauke.textron.com

Sales support

Northern region Friedrich Reusch

Phone: +49 (0)511 / 71 27 371 +49 (0)511 / 71 27 372 Mobile: +49 (0)172 / 70 51 242 freusch@klauke.textron.com

CENTRAL REGION

Regional sales manager Roland Recke

Phone: +49 (0)2191 / 907 - 368 +49 (0)2191 / 907 - 340 Mobile: +49 (0)151 / 14 63 97 59 rrecke@klauke.textron.com

Area sales manager

NRW-Middle, Hessen, Rheinland-Pfalz, Saarland **Wolfgang Frowein**

Phone: +49 (0)2191 / 907 - 119 +49 (0)2191 / 907 - 340 Fax: Mobile: +49 (0)172 / 70 51 241 wfrowein@klauke.textron.com

Mecklenburg-Vorpommern, Berlin, Brandenburg **Dietmar Hilgendorf**

Phone: +49 (0)3385 / 50 37 11 +49 (0)3385 / 50 37 12 Fax: Mobile: +49 (0)172 / 70 51 239 dhilgendorf@klauke.textron.com

Sachsen

Mario Schüppel

Phone: +49 (0)371 / 84 49 140 +49 (0)371 / 84 49 141 Fax: Mobile: +49 (0)172 / 70 51 244 mschueppel@klauke.textron.com

Thüringen Georg Göritz

Phone: +49 (0)3628 / 92 98 46 +49 (0)3628 / 92 98 47 Fax: Mobile: +49 (0)151 / 57 13 61 16 ggoeritz@klauke.textron.com

Nordrhein-Westfalen South-West Marc Schüler

Phone: +49 (0)2191 / 907 - 0 +49 (0)2191 / 907 - 340 Mobile: +49 (0)173 / 86 22 272 mschueler@klauke.textron.com

Sales support

Central region **Daniel Frowein**

> Phone: +49 (0)2191 / 907 - 0 Fax: +49 (0)2191 / 907 - 340 Mobile: +49 (0)151 / 14 63 97 62 dfrowein@klauke.textron.com

SOUTHERN REGION

Regional sales manager Thomas Keck

Phone: +49 (0)7042 / 10 22 80 +49 (0)7042 / 10 23 85 Mobile: +49 (0)151 / 14 63 97 69 tkeck@klauke.textron.com

Representatives

 Baden-Württemberg Claudia Nolle e. K.

Industrial representatives Teckstraße 21 D-73734 Esslingen-Berkheim Phone: +49(0)711/365611-0 +49(0)711/365611-99 Fax: info@iv-nolle.de

Bayern North Jürgen Doerner Handelsvertretungen GmbH Kafkastraße 5

D-90471 Nürnberg Phone: +49(0)911/99815-0 +49(0)911/99815-40 Fax: nuernberg@hv-doerner.de

Bayern South Jürgen Doerner Industrievertretungen GmbH Bussardstraße 8

D-82166 Gräfelfing Phone: +49(0)89/898070-0 Fax: +49(0)89/898070-35 info@doerner-muenchen.de

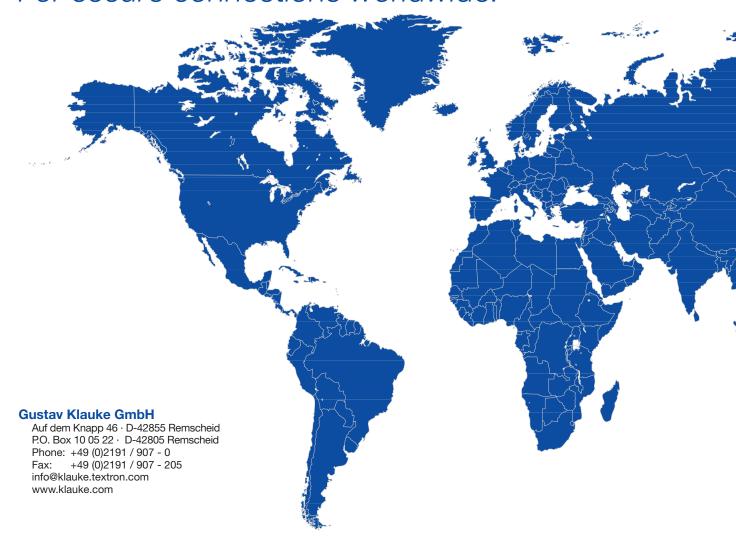
Sales support

Southern region

Philipp Rausch

Phone: +49 (0)8431 / 64 11 903 Fax: +49 (0)8431 / 64 11 989 Mobile: +49 (0)151 / 14 63 97 74 prausch@klauke.textron.com

For secure connections worldwide.



Distributorships / sales offices

GREENLEE TEXTRON INC.

4455 Boing Drive Rockford, II. 61109-2988 America

Phone: +1 815 / 397 - 7070 Fax: +1 815 / 397 - 9247 www.greenlee.textron.com

KLAUKE FRANCE S.A.R.L.

16, Rue Saint-Louis, Z.I. ACTISUD F-57150 Creutzwald

France

Phone: +33 (0)387 / 29 84 70 Fax: +33 (0)387 / 29 84 79 gcordel@klauke.textron.com

■ KLAUKE HANDELSGES.M.B.H.

Ared-Str. 7 TOP 3 2544 Leobersdorf Austria

Phone: +43 (0)2256 / 629 25 Fax: +43 (0)2256 / 629 25 - 30 atoffice@klauke.textron.com

000 KLAUKE RUS

Russian Federation 125009, Moscow, Tverskaya 16/2 Building 1, 7th floor, office 901B Russian Federation

Phone: +7 495 / 935 89 71
Fax: +7 495 / 935 89 62
slekomtseva@klauke.textron.com

KLAUKE UK LTD.

Hillside Road East, Bungay, Suffolk NR35 1JX

Phone: +44 (0)1986 891519 Fax: +44 (0)1986 896132 uksales@klauke.textron.com

GREENLEE COMMUNICATIONS LIMITED

Brecon House, William Brown Close Llantarnam Park, Cwmbran NP44 3AB Wales

Phone: +44 (0)1633 / 62 77 10 Fax: +44 (0)1633 / 62 77 11 info@tempo.textron.com

TEXTRON CHINA INC. GREENLEE / KLAUKE OFFICE

Floor 6th Lippo Plaza, No. 222 Huai Hai M. Rd 200021 Shanghai,

P.R. of China Phone: +86 21 / 53 96 65 55 Fax: +86 21 / 53 96 69 13 jsking@greenlee.textron.com

GREENLEE / KLAUKE OFFICE SOUTH EAST ASIA

50 Loyang Way Singapore 508743

Phone: +65 / 98 19 22 97 Fax: +65 / 67 48 16 51 cwee@greenlee.textron.com

GREENLEE / KLAUKE OFFICE AUSTRALIA / NEW ZEALAND

25 Webb Ellis Court, Pelican Waters, Queensland 4551 Australia

Phone: +61 7 / 54 39 73 77 Fax: +61 7 / 54 39 75 77 nellement@greenlee.textron.com

GREENLEE / KLAUKE OFFICE LATIN AMERICA

1846 nw 82 Ave Miami, Florida 33126 America

Phone: +1 305 / 406 1315 Fax: +1 305 / 406 1715 rvazquez@greenlee.textron.com

TEXTRON INDIA PVT. LTD. GREENLEE / KLAUKE OFFICE

Global Village, Behind R V College of Engineering, RVCE Post, Mylasandra,

Bangalore – 560 059

India

Mobile: + 91 99 0232 2466 Fax: +91-80-6712 9250 bpaul01@textron.com



Representatives worldwide

America

GREENLEE TEXTRON INC.

Rockford, II. 61109-2988 Phone: +1 815 / 397 - 7070 Fax: +1 815 / 397 - 9247 www.greenlee.textron.com

Andorra

GAVE ELECTRO, S.L.

08430 La Roca del Valles Phone: +34 93 / 842 48 87 Fax: +34 93 / 842 27 55 gave@gave.com

Argentina

JAIME LARRABE

Penalolen, Chile Phone: +562 / 279 0139 +562 / 279 0139 jaimelarrabe@yahoo.es

Australia

GREENLEE / KLAUKE OFFICE AUSTRALIA / NEW ZEALAND

Pelican Waters 4551 QLD Phone: +61 7 / 5439 7377 Fax: +61 7 / 5439 7577 nellement@greenlee.textron.com

Austria

KLAUKE HANDELSGES.M.B.H.

2544 Leobersdorf Phone: +43 2256 / 629 25 +43 2256 / 629 25-30 atoffice@klauke.textron.com

Bahrain

NISSAD DEVELOPMENT CO. LTD.

1306 Nicosia Phone: +357 22 / 76 50 14 +357 22 / 76 15 35 Fax:

info@nissad.com

TOMAD INTERNATIONAL INC.

Beirut G GREENLEE. Phone: +961 1 / 88 49 44 +961 1 / 88 49 29 Fax: vahe@tomad.info

Belarus

000 KLAUKE RUS

125009 Moscow Phone: +7 495 / 935 89 71 +7 495 / 935 89 62 Fax: slekomtseva@klauke.textron.com

Belgium

NBR NUSSBAUMER NV/SA

1500 Halle KlauKe' Phone: +32 2 / 35 70 940 +32 2 / 35 49 679 Fax: info@nussbaumer.be

SADINTER SOGECOMEX S.A.

1190 Brussel Forest G GREENLEE Phone: +32 2 / 34 90 911 Fax: +32 2 / 34 35 139 contact@sadinter.be

Bosnia and Herzegovina KABELTECH DOO

71000 Sarajevo Phone: +387 33 / 71 30 61 +387 33 / 71 30 63 Fax: info@kabeltech.co.ba

Brazil

GREENLEE / KLAUKE OFFICE LATIN AMERICA

Miami, Florida 33126 / USA Phone: +1 305 / 406 1315 Fax: +1 305 / 406 1715 rvazquez@greenlee.textron.com

Brunei

GREENLEE / KLAUKE OFFICE SOUTH EAST ASIA

Singapore 508743 Phone: +65 9819 /22 97 +65 6748 / 1651 cwee@greenlee.textron.com

Bulgaria

V & V ISOMATIC LTD.

1505 Sofia

Phone: +359 2 / 95 83 111 +359 2 / 95 82 270 v.v@technolink.com

Canada

GREENLEE TEXTRON INC.

Rockford, II. 61109-2988 Phone: +1 815 / 397 - 7070 +1 815 / 397 - 9247 www.greenlee.textron.com

China

TEXTRON CHINA INC. **GREENLEE / KLAUKE OFFICE**

Shanghai 200021 Phone: +86 21 / 53 96 65 55 +86 21 / 53 96 69 13 jsking@greenlee.textron.com

Columbia

LAUMAYER COLOMBIANA S.A.

Medellín

Phone: +57 4 361 85 85 +57 4 361 36 67 comercial@laumayer.com

Croatia

KONEKT D.O.O.

HR10000 Zagreb Phone: +385 1 / 23 61 890 +385 1 / 23 61 882 Fax: konekt@konekt.hr

Czech Republic KLAUKE Z. NITSCH S.R.O.

14000 Praha 4 - Pankrac Phone: +42 02 / 61 21 3219 Fax: +42 02 / 61 21 3218

klauke@klauke.cz

Denmark

WEXOE A/S

3500 Vaerloese Phone: +45 / 45 46 58 00 +45 / 45 46 58 01 Fax: wexoe@wexoe.dk

Ecuador

AMER-ANDES

Bogota/Columbia Phone: +571 / 616 7094 Fax: +571 / 610 2402 amerandes@cable.net.co

Egypt

WARCO ENGINEERING & TRADING

Mohandessin / Giza Phone: +20 2 / 30 25 265 +20 2 / 30 25 275 Fax: aragab@commnet.com.eg

TOMAD INTERNATIONAL INC.

Beirut

Fax: +961 1 / 88 49 29 vahe@tomad.info

El Salvador

ABELLA GROUP

Miami, Florida 33126 / USA Phone: +1 305 470 9800 Fax: +1 305 470 2202 ae.aespinoza@abellagroup.com

Estonia

LAPP MILTRONIC SIA ESTONIAN **BRANCH**

Lääne-Virumaa 44307 Phone: +372 / 65 18 970 +372 / 65 18 971 Fax: info@lappmiltronic.ee

Finland

CABLEX OY

20360 Turku

Phone: +358 2 / 88 00 020 +358 2 / 88 00 021 Fax: reijo.karlsson(a)cablex.fi

■ France

KLAUKE FRANCE S.A.R.L.

57150 Creutzwald Phone: +33 387 / 29 84 70 Fax: +33 387 / 29 84 79 gcordel@klauke.textron.com

■ Great Britain

KLAUKE UK LTD.

Bungay Suffolk NR35 1JX Phone: +44 (0)1986 891519 Fax: +44 (0)1986 896132 uksales@klauke.textron.com

Greece

KALAMARAKIS SAPOUNAS S.A.

13671 Chamomilos-Acharnes Phone: +30 2 / 10 24 06 000-6 Fax: +30 2 / 10 24 06 007 ksa@ksa.gr

■ Guatemala

ABELLA GROUP

Miami, Florida 33126 / USA Phone: +1 305 470 9800 Fax: +1 305 470 2202 ae.aespinoza@abellagroup.com

Hong Kong

TEXTRON CHINA INC. GREENLEE / KLAUKE OFFICE

Shanghai 200021 Phone: +86 21 / 53 96 65 55 Fax: +86 21 / 53 96 69 13 jsking@greenlee.textron.com

■ Hungary

TRENDELEKTRO KFT.

H-2049 DIOSD Phone: +36 23 / 545 140 Fax: +36 23 / 545 141 info@trendelektro.hu

Iceland

REYKJAFELL LTD.

125 Reykjavik Phone: +354 / 58 86 010 Fax: +354 / 58 86 088 reykjafell@reykjafell.is

India

TEXTRON INDIA PVT. LTD. GREENLEE / KLAUKE OFFICE

Bangalore 560 059 Mobil: + 91 99 0232 2466 Fax:+91-80-6712 9250 bpaul01@textron.com

Indonesia

GREENLEE / KLAUKE OFFICE SOUTH EAST ASIA

Singapore 508743 Tel.: +65 9819 / 22 97 Fax: +65 6748 / 1651 cwee@greenlee.textron.com

Ireland

KLAUKE UK LTD.

Bungay Suffolk NR35 1JX Phone: +44 (0)1986 891519 Fax: +44 (0)1986 896132 uksales@klauke.textron.com

Israel

SHAY A.U., LTD.

49222 Petach Tikva Phone: +972 3 / 92 33 601 Fax: +972 3 / 92 34 601 ilans@uriel-shay.com

Italy

COMMERCIALE TIEGER S.R.L.

20159 Milan Phone: +39 02 / 68 86 330 Fax: +39 02 / 66 80 2529 comtieger@tin.it

Japan

GOODMAN INC.

Yokohama, Kanagawa 236-0037 Phone: +81 / 45 - 701-5680 Fax: +81 / 45 - 701-4302 kwantanabe@goodman-inc.co.jp

Jordan

NISSAD DEVELOPMENT CO. LTD.

1306 Nicosia Phone: +357 22 / 76 50 14 Fax: +357 22 / 76 15 35 info@nissad.com

TOMAD INTERNATIONAL INC.

Beirut
Phone: +961 1 / 88 49 44
Fax: +961 1 / 88 49 29
vahe@tomad.info

Kazakhstan

000 KLAUKE RUS

125009 Moscow Phone: +7 495 / 935 89 71 Fax: +7 495 / 935 89 62 slekomtseva@klauke.textron.com

Kuwait

NISSAD DEVELOPMENT CO. LTD.

1306 Nicosia
Phone: +357 22 / 76 50 14
Fax: +357 22 / 76 15 35
info@nissad.com

TOMAD INTERNATIONAL INC.

Beirut
Phone: +961 1 / 88 49 44
Fax: +961 1 / 88 49 29
vahe@tomad.info

Latvia

LAPP MILTRONIC SIA

Riga LV 1012 Phone: +371 / 75 01 900 Fax: +371 / 75 01 909 info@lappmiltronic.lv

■ Lebanon

TOMAD INTERNATIONAL INC.

Beirut Phone: +961 1 / 88 49 44 Fax: +961 1 / 88 49 29 vahe@tomad.info

AL-BONIAN GROUP

Beirut Phone: +961 1 / 38 57 08 Fax: +961 1 / 38 7 14 albonian@cyberia.net.lb

Lithuania

LAPP MILTRONIC UAB

Vilnius, LT-10306 Phone: +370 5 / 27 80 390 Fax: +370 5 / 27 80 397 info@lappmiltronic.lt

Luxembourg

M & A PARTNERS

8055 Bertrange Phone / Fax: +352 2 / 26 36 20 46 architl@pt.lu

Macedonia

SISKON SYSTEMS ENGINEERING

91000 Skopje Phone: +389 2 / 30 62 423 Fax: +389 2 / 30 61 250 siskon@mt.net.mk

Malaysia

GREENLEE / KLAUKE OFFICE SOUTH EAST ASIA

Singapore 508743 Phone: +65 9819 /22 97 Fax: +65 6748 / 1651 cwee@greenlee.textron.com

■ Mexico

REMAT, S.A. DE C.V.

México, D.F. Phone: +52 / 55 5256 3440 Fax: +52 / 55 5256 3441 alvarobnava@aol.com

Montenegro NIDAS D.O.O.

11000 Beograd Phone: +381 11 / 24 17 714 Fax: +381 11 / 24 17 715 nidas@eunet.rs

■ Morocco

ETS. LOUIS GUILLAUD

2000 Casablanca Phone: +212 22 / 30 59 71 Fax: +212 22 / 31 78 88 elg@casanet.net.ma

■ The Netherlands

H.K. ELECTRIC BV

5321 JZ Hedel Phone: +31 73 / 59 97 599 Fax: +31 73 / 59 97 590 info@hkelectric.nl

New Zealand

GREENLEE / KLAUKE OFFICE AUSTRALIA / NEW ZEALAND

Pelican Waters 4551 QLD Phone: +61 7 / 5439 7377 Fax: +61 7 / 5439 7577 nellement@greenlee.textron.com

Nicaragua

ABELLA GROUP

Miami, Florida 33126 / USA Phone: +1 305 470 9800 Fax: +1 305 470 2202 ae.aespinoza@abellagroup.com

Norway

MILTRONIC AS

3036 Drammen Phone: +47 32 26 13 00 Fax: +47 32 26 13 99 info@miltronic.no

Oman

NISSAD DEVELOPMENT CO. LTD.

1306 Nicosia
Phone: +357 22 / 76 50 14
Fax: +357 22 / 76 15 35
info@nissad.com

TOMAD INTERNATIONAL INC.

Beirut Phone: +961 1 / 88 49 44 Fax: +961 1 / 88 49 29 vahe@tomad.info

Paraguay

JAIME LARRABE

Penalolen, Chile Phone: +562 / 279 0139 +562 / 279 0139 jaimelarrabe@yahoo.es

■ Philippines

DULHUNTY TRADING INT'L

1115 Quezon City Phone: +63 / 26 69 10 23 +63 / 24 16 82 84 Fax: gabatse@yahoo.com

Poland

RB BREXIM SP. Z O.O.

05-825 Marynin Phone: +48 22 / 73 44 380 Fax: +48 22 / 73 44 381 rboffice@brexim.pl

Portugal

PALISSY GALVANI ELECTRICIDADE SA.

2625-607 Vialonga Phone: +35 121 / 32 23 400 +35 121 / 32 23 410 info@palissygalvani.pt

Qatar

NISSAD DEVELOPMENT CO. LTD.

1306 Nicosia Phone: +357 22 / 76 50 14 Fax: +357 22 / 76 15 35 info@nissad.com

G GREENLEE.

TOMAD INTERNATIONAL INC.

Phone: +961 1 / 88 49 44 +961 1 / 88 49 29 Fax: vahe@tomad.info

Romania

GERKON ELECTRO S.R.L.

530211 Miercurea-Ciuc Phone: +40 266 / 37 21 08 +40 266 / 31 22 38 office@gerkonelectro.ro

Russia

000 KLAUKE RUS

125009 Moscow Phone: +7 495 / 935 89 71 Fax: +7 495 / 935 89 62 sletkomtseva@klauke.textron.com

Saudi Arabia

NISSAD DEVELOPMENT CO. LTD.

1306 Nicosia Phone: +357 22 / 76 50 14 +357 22 / 76 15 35 info@nissad.com

TOMAD INTERNATIONAL INC.

Phone: +961 1 / 88 49 44 Fax:

+961 1 / 88 49 29 vahe@tomad.info

Serbia

NIDAS D.O.O.

11000 Beograd Phone: +381 11 / 24 17 714 +381 11 / 24 17 715 Fax:

nidas@eunet.rs

■ Singapore

GREENLEE / KLAUKE OFFICE SOUTH EAST ASIA

Singapore 508743 Phone: +65 9819 /22 97 +65 6748 / 1651 cwee@greenlee.textron.com

Slovakia

KLAUKE Z. NITSCH S.R.O.

14000 Praha 4 - Pankrac Phone: +42 02 / 61 21 3219 +42 02 / 61 21 3218 Fax: klauke@klauke.cz

Slovenia

ISARIA D.O.O.

1420 Trbovlje Phone: +386 3 / 56 31 800 Fax: +386 3 / 56 31 802 isaria.trbovlje@siol.net

South Africa

EBERHARDT-MARTIN CC.

2092 Newlands Phone: +27 11 / 28 80 000 Fax: +27 11 / 67 32 043 ebm@ebm.co.za

G GREENLEE

IMG

Benoni

Phone: +27 11 / 425 4062 +27 11 / 425 2554 tony@imgdistributors.co.za

South Korea

KESCO CO., LTD

Seoul 150-093 Phone: +82 2 / 26 14 09 89 +82 2 / 26 14 09 66 tsoh@ikesco.com

Spain

GAVE ELECTRO, S.L.

08430 La Roca del Valles Phone: +34 93 / 84 24 887 +34 93 / 84 22 755 Fax: gave@gave.com

Sweden

MILTRONIC AB

61129 Nyköping Phone: +46 155 / 77 700 +46 155 / 77 701 Fax: info@miltronic.se

Switzerland

FERRATEC AG

8964 Rudolfstetten Phone: +41 56 / 64 92 121 Fax: +41 56 / 64 92 141 info@ferratec.ch

Syria

G GREENLEE.

AROYAN & KHATCHADOURIAN CO.

Klauke

Phone: +963 21 46 56 558 +963 21 46 40 692 a-kco@aloola.sy

Taiwan

PO CHARNG CO. LTD

Taipei 110

Phone: +886 / 22 76 31 623 +886 / 22 76 67 492 Fax: kevin@pocharng.com.tw

Thailand

SUMMIT ENG. AND SERVICES CO. LTD

10400 Bangkok Phone: +662 / 64 22 478 +662 / 64 23 085 Fax: sudsuda@ses-th.com

BE PROMT TRADING & SERVICES LTD

Bangkok 10100-07 Phone: +662 / 22 54 201 Fax: +662 / 22 54 200 beprompt_b@yahoo.com

Turkey

Kardeş Elektrik Sanayi ve Ticaret A.Ş.

343295 Besyol-Sefaköy / Istanbul Phone: +90 212 / 62 49 204 +90 212 / 59 24 810 Fax: info@kardeselektrik.com.tr

Ukraine

000 KLAUKE RUS

125009 Moscow Phone: +7 495 / 935 89 71 Fax: +7 495 / 935 89 62 slekomtseva@klauke.textron.com

United Arab Emirates

NISSAD DEVELOPMENT CO. LTD.

Phone: +357 22 / 76 50 14 1306 Nicosia +357 22 / 76 15 35 Fax:

info@nissad.com

TOMAD INTERNATIONAL INC.

Beirut G GREENLEE. Phone: +961 1 / 88 49 44

Fax: +961 1 / 88 49 29 vahe@tomad.info

Uruguay

JAIME LARRABE

Penalolen, Chile Phone: +562 / 279 0139 Fax: +562 / 279 0139 jaimelarrabe@yahoo.es

Venezuela

RB TOOLS

Caracas 1060 Phone: +58 212 9927491 +58 212 264 4412 Fax: rbtools@movistar.net.ve

Vietnam

ELESCO ASIA PTE LTD

349562 Singapore Phone: +65 / 67 41 42 48 Fax: +65 67 77 36 86 sales18@elesco.comsg

Yemen

NISSAD DEVELOPMENT CO. LTD.

1306 Nicosia Phone: +357 22 / 76 50 14

Fax: +357 22 / 76 15 35 info@nissad.com

TOMAD INTERNATIONAL INC.

Beirut

Phone: +961 1 / 88 49 44 Fax: +961 1 / 88 49 29 G GREENLEE