



The reliable  
allrounders

Semi-automatic  
universal sawing  
machines



**KALTENBACH**

POWERFUL SOLUTIONS – PASSIONATE PEOPLE

 [www.kaltenbach.com](http://www.kaltenbach.com)



## ■ POWERFUL SOLUTIONS – PASSIONATE PEOPLE

Sawing, drilling, thermal cutting, shot blasting or painting – working with steel means creating for the future. With more than 135 years of experience, KALTENBACH is one of the leading companies in high-quality steel processing and conservation equipment, worldwide.

Creative and innovative solutions to guarantee the quality of your steel products. Durable and robust. Most environmentally friendly machines, with considerable savings on energy and consumables and best costs of ownership. Special attention is given to a safe, healthy and pleasant working environment.

Our passionate teams have worked for years to create and optimize products that give you a competitive advantage in your business.



## RESPONSIBILITY MADE IN GERMANY!



### STEEL TURNS GREEN!

Since 1887 we have been producing reliable and high-quality machines at our Lörrach site on an area of 30,000 m<sup>2</sup>. But we are more than just a manufacturer of sophisticated steel products: We combine tradition, technology and sustainability under one roof!

As an industrial company, we bear a significant responsibility for the environment and are committed to a climate-neutral future. To do this, we specifically rely on environmentally friendly raw materials and forward-looking processes. The high level of vertical integration at our location in Lörrach makes a valuable contribution to the change towards environmentally friendly steel production. We also consistently use resource-saving technologies such as LED lighting and energy-efficient drives in order to sustainably minimize our company's energy consumption and emissions.

At KALTENBACH, we stand for the highest quality, durable products and clear values that are deeply rooted in our company. We take our social responsibility seriously and are committed to fairness and the highest social standards throughout the value chain.

## Versatility and highest precision

Our semi-automatic universal sawing machines are real allrounders for your production! They are designed for a wide range of applications: Solid material or tubes? Standard or special profile? Single cut or whole batches? Aluminium or steel? Our semi-automatic allrounders always cut reliably and with the highest precision.

We combine know-how, years of experience and innovative strength Made in Germany, so that you can master any task. Discover safe and precise cutting with KALTENBACH!

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Heavy duty gearbox with hardened and ground, helical gears of the KKS series.



Saw blade cutting immediately. Swivel range 180°.



Carbide-tipped saw band guides of the KBS series.

**ABSOLUTE VERSATILITY  
 WITH POWERFUL  
 APPEARANCE.**



Horizontal clamping device on the right and/or left of the saw blade for optimal material clamping.



Minimum quantity lubrication optionally available in addition to water cooling for "near-dry" machining.



Big front door for good accessibility for saw blade changes and disposal of swarf.

The **KKS 400 U** and **KKS 450 U** models are semi-automatic universal mitring circular sawing machines, that are particularly suitable for single cuts and processing of small batches.

**BENEFITS AT A GLANCE**

- > Saw blade  $\varnothing$  up to 450 mm
- > Mitre adjustment 180°, optional NC-controlled
- > Clamping, sawing, reverse motion, unclamping – at the touch of a button
- > Push-button adjustment of the cutting height
- > User-friendly electronic control directly on the machine
- > Space saving installation
- > Long-stroke clamping cylinder dispenses with need to manually preset the vertical clamp – a clear benefit when the dimensions of the material being cut frequently change
- > Two cutting speeds (optionally frequency-controlled) for virtually all applications



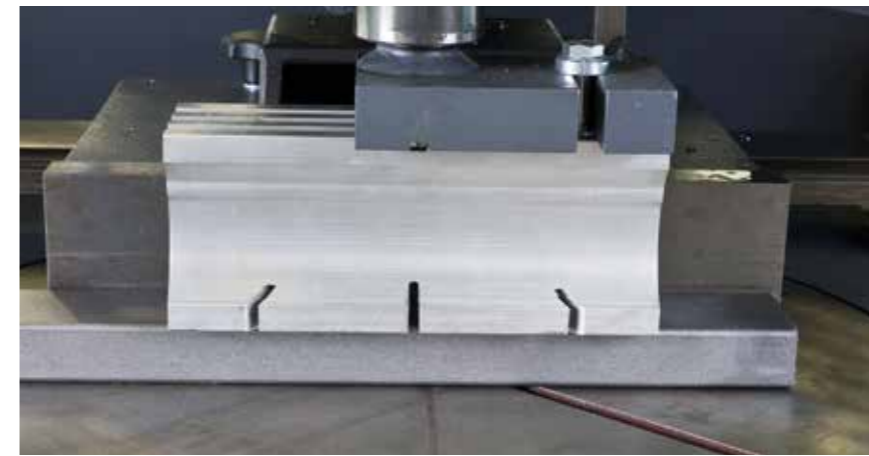
Hydraulic saw blade feed, infinitely variable according to table.



Clamping pressure reduction for optimal clamping of thin-walled material (only KKS 450 U).



Long-stroke clamping cylinder to minimize the set-up effort.



Workpiece stop and material clamping on both sides on the sawblade.



Easy operating and programming.

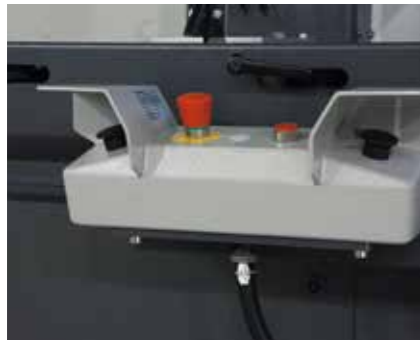
**Faster, more precise and productive –  
 the double circular saw KKS 400 DH**



- > The double circular saw KKS 400 DH consists of two KKS 400 H machines with travelling frame and central control system.
- > One machine can be positioned for the adjustment of the desired off-cut length.
- > The operation of both machines is controlled centrally via foot switch. At any time both of the machines can also be operated separately. Additionally on one of the machines a length measuring device can be fitted.



**STEPLESSLY VARIABLE.  
ALWAYS AT YOUR SIDE.**



Two-handed operation instead of protection cover.



Drilling pattern in the saw table for clamping fixtures of the customers own design.



Easy operating and programming.

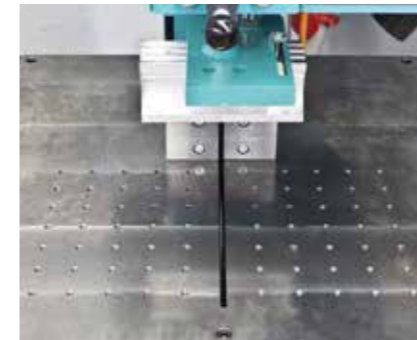
The **KKS 400/450 T** has been developed for the special requirements of jig work, for example for bent pipes. The table can be rotated within a 180° radius for mitre cuts.

**BENEFITS AT A GLANCE**

- > Free saw table with tapped holes to enter customer specific clamping devices
- > Electronic cut stroke limitation for a reduction in cycle times
- > Reinforced drive motor for high cutting performances
- > Optional, dynamic feed control via proportional valve and frequency-controlled saw drive (3 feed control speeds according to cut heights) to reduce the cutting time of the material
- > Reinforced clamping arm with hydraulic long stroke clamping cylinder to minimise the adjustment times when changing material size
- > Saw blade Ø 400/450 mm
- > Minimal lubrication for nearly dry saw cuts



**WORK FLEXIBLY.  
SAW SAFELY.**



Drilling pattern in the saw table for clamping fixtures of the customers own design.



Big front door for good accessibility for saw blade changes and disposal of swarf.



Easy operating and programming.

The **KKS 450 R** is the specialist for straight cuts of bent pipes, for example in the exhaust pipe industry or hydroforming. The saw blade diameter of 450 mm ensures a large cutting area.

**BENEFITS AT A GLANCE**

- > Free saw table with tapped holes to enter customer specific clamping devices
- > Electronic cut stroke limitation for a reduction in cycle times
- > Optional, dynamic feed control via proportional valve and frequency-controlled saw drive (3 feed control speeds according to cut heights) to reduce the cutting time of the material
- > Reinforced clamping arm with hydraulic long stroke clamping cylinder to minimise the adjustment times when changing material size
- > Forklift pockets to enable fast transportation between locations
- > Saw blade Ø 450 mm
- > Minimal lubrication for nearly dry saw cuts
- > Saw blade feed up to 1,200 mm/min

**BECAUSE ONLY THE BEST IS GOOD ENOUGH FOR ALUMINIUM.**



Minimum lubrication.



Large front door for rapid saw blade change and easy maintenance.



Vertical hardwood clamping block to protect material surface.



Rotary table for mitre cuts with a pivoting range of 180°.



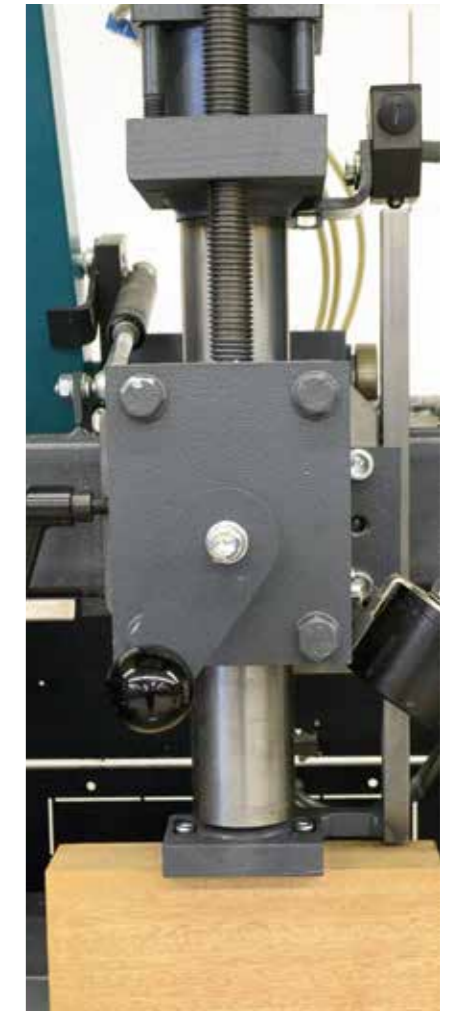
Easy operating and programming.



Hydropneumatic saw blade feed.



Feed regulator for universal, infinitely variable adjustment even during the sawing process.



Reinforced workpiece clamping device with hand crank for pre-adjustment.

### BENEFITS AT A GLANCE

- > Clamping, sawing, reverse motion, unclamping – all at the touch of a button
- > Suitable for single cuts and processing of small batches
- > User-friendly electronic control unit mounted directly on the machine
- > Good accessibility for saw blades changes and maintenance work
- > Workpiece clamping device on both sides of the saw blade and infinitely variable saw blade feed for high cutting quality
- > KALTENBACH 'cut from below' principle ensures good chip flow
- > Ergonomically arranged controls for ease-of-use
- > Electronically adjustable cutting stroke limit and rapid return of saw blade for short cycle times



# Transporting and Measuring

## MANUAL AND NC-CONTROLLED LENGTH MEASURING DEVICE

The highly developed KALTENBACH modular system offers the opportunity to adjust the machine to the customer specific requirements. Roller conveyors are available in various lengths.



Universal mitre circular saw with length measurement system L 42 NC and T3 infeed conveyor system. Length stop optionally attachable on the left or right.



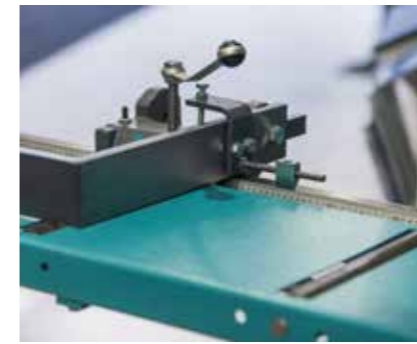
**T3 feed conveyor**  
Robust design, extendable by 1,000 mm.



**Stop rollers**  
Adjustable, for material guidance (optional).



**Material rest**  
For temporary storing of cut material (optional).



**L 45 E length measurement device**  
Manually adjustable to the desired measured length. High degree of accuracy with Vernier scale and manually liftable stop arm.



**L 45 E length measurement device with digital display**  
The L 45 E length measuring device can be optionally fitted with a digital display.



**L 45 I length measurement device**  
The stop is moved using a handwheel; the clamp is operated hydraulically by a hand valve. Digital length display.



**L 42 NC length measurement device**  
Easy operation and programming on the sawing machine.



**L 42 NC length measurement device**  
For the electronic adjustment of the measuring length via NC-control.

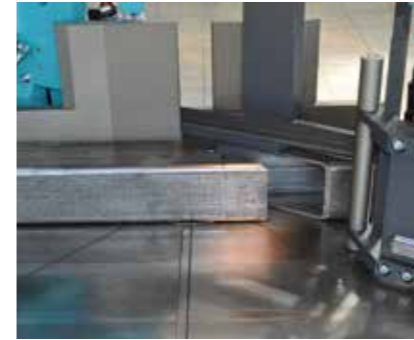


**Pivoting stop plate**  
For easy feeding of small parts.



**L 42 P automatic material feed and length stop**  
Can be used as length stop or pusher plate.

**CUTTING  
 TO THE HIGHEST  
 STANDARDS.**



Manual cutting angle setting,  
 optional NC-controlled.



Heavy duty frequency-controlled geared  
 motor.



Carbide-tipped saw band guides for  
 maximum cutting precision.



Saw frame pre-stressed running on  
 play free linear bearings.



Easy operation via touch screen.



Hydraulic saw band feed,  
 steplessly adjustable.



Independently driven swarf brush.

KBS series – the allrounders with large cutting area. The band saws are ideally suited to metal construction, steel fabrication and automotive construction.

**BENEFITS AT A GLANCE**

- > Vertical saw in robust twin-column construction.
- > High cutting performance and high-precision thanks to the inclined position of the saw band
- > Suitable for single cuts and processing of small batches
- > Self-regulating profile clamping with horizontal and vertical clamping device within the automatic cycle control
- > Good accessibility for saw band changes
- > High cutting quality thanks to work piece clamping on both sides of the saw band, vertical clamping device as well as steplessly adjustable saw band feed rate
- > Mitre adjustment without length correction thanks to pivot point of the machine in saw band-work piece stop-axis
- > Electronic saw band slippage control
- > Hydraulic band clamping



KBS band sawing machine with manual length stop.



# Series at a glance

Hard facts	KKS 400 U	KKS 450 U	KKS 400 DH	KKS 400 T	KKS 450 T		KKS 450 R	SKL 450 U
Saw blade Ø	400 mm	450 mm	400 mm	400 mm	450 mm		450 mm	450 mm
Drive performance – standard – optional – optional frequency-c.	1.8/2.7 kW 3.7/4.5 kW 4.0 kW	1.8/2.7 kW 3.7/4.5 kW 4.0 bzw. 5.5 kW	1.8/2.7 kW 3.7/4.5 kW 4.0 kW	4.0 kW	5.5 kW		1.8/2.7 kW 3.7/4.5 kW 4.0 bzw. 5.5 kW	3.7/4.7 kW 4.7/6.3 kW
Output hydraulic	25 l/min	25 l/min	25 l/min	25 l/min	25 l/min		25 l/min	
Cutting speed – standard or or – optional frequency-c.	10/20 m/min 13/26 m/min 15/30 m/min 7-43 bzw. 20-95 m/min	11/22 m/min 13/26 m/min 15/30 m/min 7-43 bzw. 15-75 m/min	10/20 m/min 13/26 m/min 15/30 m/min 7-43 bzw. 20-95 m/min	20-95 m/min	15-75 m/min		15/30 m/min  7-43 bzw. 15-75 m/min	1,950/3,900 m/min
Saw blade feed rate – steplessly adjustable – fast return stroke	0-1,000 mm/min 3,300 mm/min	0-1,000 mm/min 3,300 mm/min	0-1,000 mm/min 3,300 mm/min	0-1,000 mm/min 3,300 mm/min	0-1,000 mm/min 3,300 mm/min		0-1,200 mm/min 3,300 mm/min	0-3,000 mm/min 4,500 mm/min
Dimensions – length – width – height	1,050 mm 900 mm 1,840 mm	1,305 mm 1,020 mm 2,000 mm	3,000 mm 900 mm 1,840 mm	1,050 mm 900 mm 1,840 mm	1,305 mm 1,020 mm 2,000 mm		1,260 mm 900 mm 1,920 mm	920 mm 1,300 mm 2,010 mm
Weight	850 kg	1,050 kg	1,700 kg	850 kg	1,050 kg		1,150 kg	680 kg
Working height	1,010 mm	1,010 mm	1,010 mm	1,010 mm	1,010 mm		1,050 mm	1,010 mm
Swivel range for mitre cuts	180 °	180 °	180 °	180 °	180 °		–	180 °
Working range ●○ (round) 90 ° ●○ (round) 45 ° ■□ (square) 90 ° ■□ (square) 45 ° ■□ (flat) 90 ° ■□ (flat) 45 °	130 mm 130 mm 120 mm 110 mm 305 x 20 mm 245 x 30 mm	150 mm 150 mm 140 mm 130 mm 330 x 40 mm 250 x 40 mm	130 mm 130 mm 120 mm 110 mm 305 x 20 mm 245 x 30 mm	130 mm 130 mm – – – –	150 mm 150 mm 140 mm 130 mm 330 x 40 mm 250 x 40 mm		140 mm – 130 mm – 330 x 40 mm –	160 mm – 145 mm 125 mm 265 x 20 mm 185 x 20 mm

Hard facts	KBS 400	KBS 621
Drive performance	4.0 kW	5.5 kW
Cutting speed	15-90 m/min	15-100 m/min
Saw band feed rate – Rapid feed and return	0-300 mm/min 2,500 mm/min.	0-300 mm/min 2,500 mm/min.
Saw band	Bi-Metall	Bi-Metall
Saw band dimensions – length – width – height	5,730 mm 1.3 mm 41 mm	6,990 mm 1.3 mm 41 mm
Dimensions – length – width – height	2,710 mm 1,280 mm 2,220/2,280 mm	3,300 mm 1,280 mm 2,550 mm
Weight	2,300 kg	3,150 kg
Working range min.	10 x 10 mm	10 x 10 mm
Working range max. 90 ° + 70 ° – 70 ° + 60 ° – 60 ° + 45 ° – 45 ° + 30 °	400 x 350 400 x 350 390 x 350 380 x 350 355 x 350 315 x 350 275 x 350 255 x 350	620 x 500 615 x 500 595 x 500 570 x 500 540 x 500 470 x 500 430 x 500 330 x 500

Features	KKS 400 U	KKS 450 U	KKS 400 DH	KKS 400 T		KKS 450 T	KKS 450 R	SKL 450 U	KBS 400	KBS 621
Long-stroke clamping cylinder	●	●	●	●		●	●	●	●	●
Horizontal clamp left / right	○	○	○	○		–	–	○		
Work piece stop with contact surfaces on both sides of the saw blade	●	●	●	○		○	–	●	●	●
Electronic cut stroke limitation	●	●	●	●		●	●	●	–	–
Visual saw blade feed control	○	○	–	○		○	○	–	–	–
Digital display of cutting angle	●	●	–	●		●	–	●	●	●
NC mitre adjustment	–	○	–	–		–	–	○	○	○
Swivelling protection cover	●	●	●	○		○	–	●	–	–
Two-handed operation	–	–	–	●		●	●	–	–	–
Workspace lighting	●	●	●	●		●	●	●	○	○
Minimal lubrication	○	○	○	●		●	●	●	●	●
Input/Output Roller conveyor T3	○	○	○	○		○	–	○	–	–
Length measurement systems	○	○	○	○		○	–	○	○	○

# Service

## OPTIMAL AVAILABILITY AND PERFORMANCE

With 135 years in business, we are the experts in steel processing and surface treatment. Our custom made service solutions guarantee that you benefit from an optimal performance, availability and continuous high quality output of your investment.

### ■ EXCELLENT PREVENTIVE MAINTENANCE PACKAGES

Maximum uptime can be ensured thanks to our excellent preventive maintenance packages. Together with you, our skilled engineers will keep your equipment up to date, improve your process efficiency and give advice to meet new market demands.

### ■ ADVANCED PROCESS MONITORING SYSTEMS

With the help of advanced process monitoring systems, you will get a clear insight in your machine performance, and preventive maintenance can be planned in time.



### ■ PROFESSIONAL HELPDESK

For fast and immediate assistance, you can rely on our help desk. Spare parts and assistance will be quickly on site, whenever and wherever needed.

### ■ ORIGINAL SPARE PARTS AND STARTER KITS

Original spare parts stand for optimum efficiency, higher uptime and a longer service life of your machine. In order to safeguard production continuity and short down time, you can make use of various starter kits. In that case you will have all parts you need on stock.

### ■ FIRST CLASS ASSISTANCE ON SITE

Knowledge, experience and a passionate commitment to support our customers in the best possible way is what makes our service strong. Together, we will look for the best manufacturing methods for your products.

### ■ EFFECTIVE TRAINING

Taylor-made training programs will improve the productivity of your machine, as well as the skills of your employees.



## GET IN TOUCH WITH OUR SERVICE DEPARTMENT!

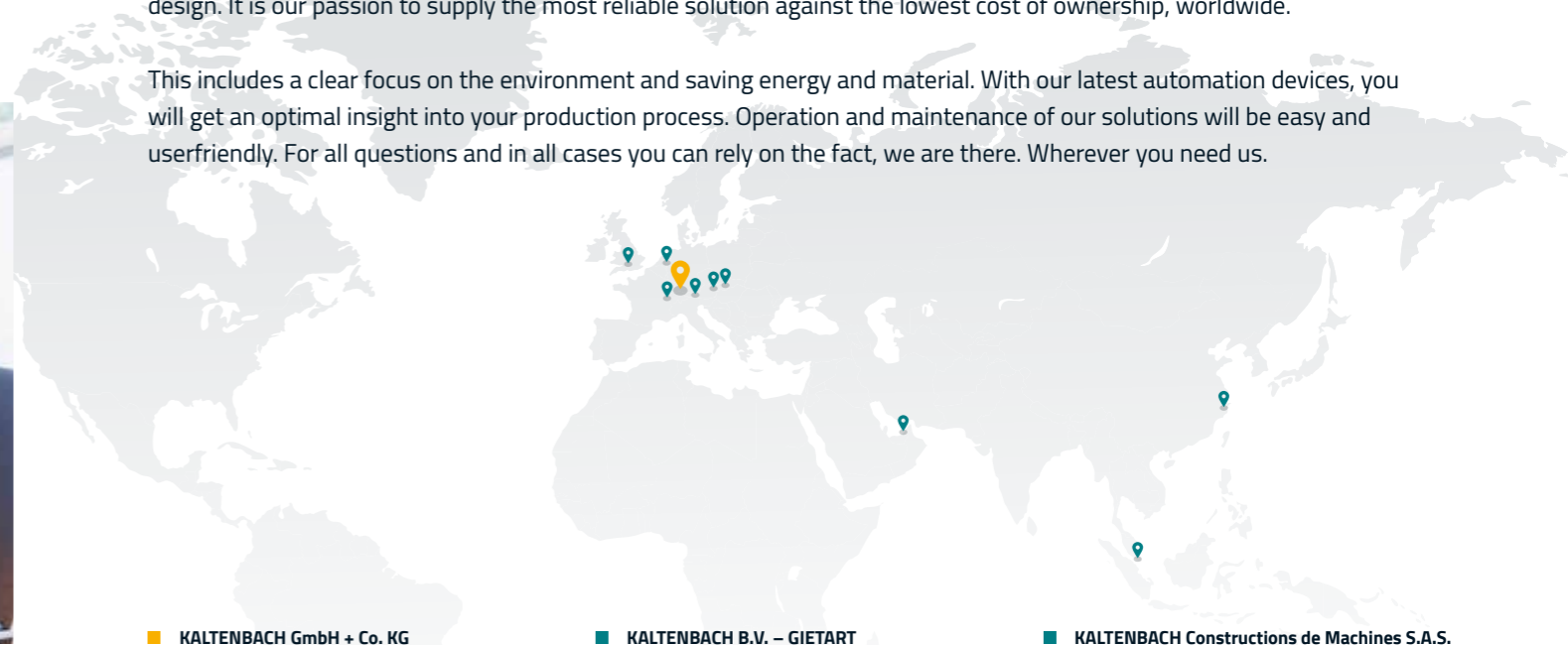
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# Contact us!

## WE ARE THERE – WHEREVER YOU NEED US

As technological leader in the field of steel processing systems, KALTENBACH excels in product quality, innovation and design. It is our passion to supply the most reliable solution against the lowest cost of ownership, worldwide.

This includes a clear focus on the environment and saving energy and material. With our latest automation devices, you will get an optimal insight into your production process. Operation and maintenance of our solutions will be easy and userfriendly. For all questions and in all cases you can rely on the fact, we are there. Wherever you need us.



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## **Convince yourself of the knowledge from 135 years of experience.**

With 135 years of experience in steel processing and surface treatment, KALTENBACH is able to face the challenge of a constantly changing global market with relentless innovation, high-quality process systems and an outstanding machine design.

Most environmentally friendly. Effective, safe and reliable. Our production lines and machines guarantee the right solution for any requirement in your business. Benefit from our industry expertise and generate added value – every day.

**[www.kaltenbach.com](http://www.kaltenbach.com)**

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