

POWERFUL SOLUTIONS –  
PASSIONATE PEOPLE



**KALTENBACH**

**RELIABLE.  
FULLY AUTOMATIC.**

**THE KKS SERIES  
400 NA | 451 NA | 463 NA**  
FULLY-AUTOMATIC UNIVERSAL  
MITRING CIRCULAR SAWS

 > MADE IN GERMANY

# REQUIREMENTS MAY CHANGE WITH TIME.

BUT REAL QUALITY IS ALWAYS UP-TO-DATE.



## OVER 130 YEARS. A COMPANY AT HER BEST AGE.

Processing materials, sawing or drilling, welding or burning them, one is not working just for the moment. But rather creating for the future. While processing such durable materials, one is relying preferably on a long-term partnership.

We provide high-quality and powerful machines, which provide you with reliability in production – and, reliable, passionate

people, who will support you with long-term assurance.

Lasting values have a long tradition at KALTENBACH. More than 130 years of experience have shown us: how to find the right solution together with our customers.

In this product folder you will find information regarding the range of applications,

from individual components to technical data and special advantages. Every machine from KALTENBACH comes installed with the expertise, skills and best system consultancy of our staff whether in Sales or Technical Services and Support.

For all questions and in all cases you can rely on the fact: we are there. Wherever you need us.

## FULLY-AUTOMATIC UNIVERSAL MITRING CIRCULAR SAWS

For the circular saws of the KKS – NA series, the material feed as well as the positioning to the desired cut length is carried out fully automatically. All automatic circular saws of the KKS series are real universal saws and are designed both for profile and solid materials.

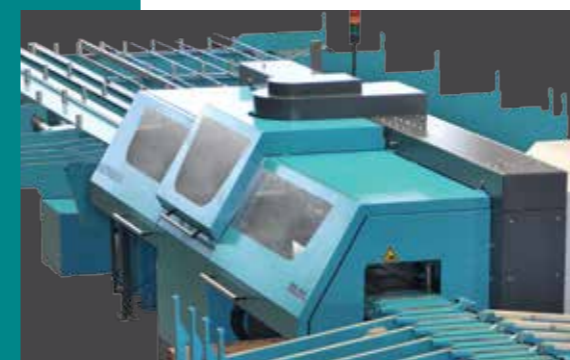
Whether you perform straight or mitre cuts, whether with less staff or unmanned, we have the right machine that will meet your optimum expectations.

### ADVANTAGES AT A GLANCE

- ▶ Automatic processing of flat, angular and solid material as well as tubes
- ▶ Various automation possibilities up to the fully unmanned sawing cell
- ▶ Easy operation and programming
- ▶ Automatic pre-storage and feed of cutting materials with various feed magazines
- ▶ Space saving installation

## CONTENT

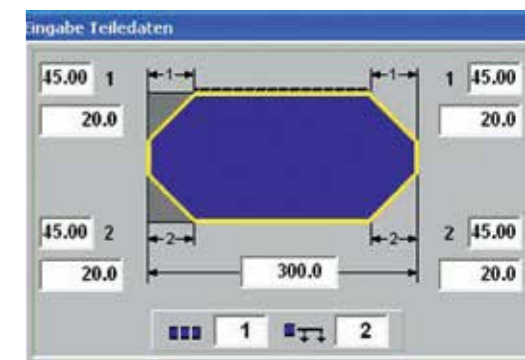
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- 1 KKS 463 NA with feed and removal device
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# KKS 400 NA

## THE EVOLUTION TO THE AUTOMATIC SAW CUTTING PROCESS



Components manufactured with a KALTENBACH machine.



KKS 400 NA



Material clamping on both side of the saw blade; work piece stop for bilateral mitre cuts.



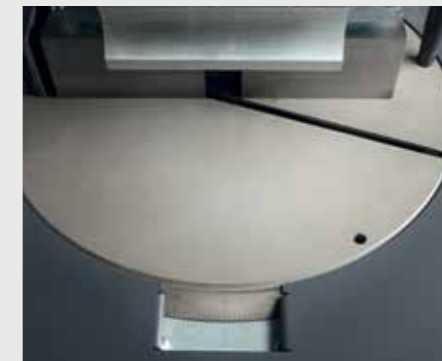
Adjustable work piece stop for 90° cuts and short residual parts lengths in automatic mode.



Automatic material supply via ball screw.



Mechanical cut stop for material identification.



Rotary table for mitre cutting angle; range 180°.



Horizontal clamping device on the removal side for material clamping during sawing.

The **KKS 400 NA** was designed for the automatic processing of flat, angular and solid materials as well as for pipes and special profiles. Various drive variants and magazines for the pre-storage of materials make this machine a real all-rounder.

We are looking forward talking to you regarding your specific applications and requirements.

### ADVANTAGES AT A GLANCE

- ▶ Automatic material supply via infeed gripper with a single stroke length of 1000 mm and up to 9999 mm in multi-stroke
- ▶ Rotary saw table for mitre cuts, range 180°
- ▶ Easy programming via input panel
- ▶ Roll rail on the removal side for the pushing of cut parts
- ▶ Compact and space saving installation structure



Hydraulic saw blade feed rate, steplessly adjustable.



Easy operation and programming via NC-control with input panel.

# KKS 451 NA

## CUTTING WITH UNIVERSAL GENIUS



**TOP LEVEL SAWING  
PERFORMANCE FOR  
CUTTING TECHNIQUES.**

Components manufactured with a KALTENBACH machine.



Highly precise positioning of the cutting material over the supply gripper with screw ball and brush-less servo motor.



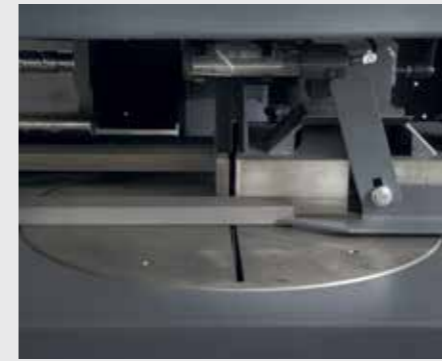
Horizontal clamping device on the removal side for material clamping during the saw cut.



Label printer for the labelling of saw cuts.



KKS 451 NA



Adjustable work piece stop for 90° cuts and short residual work piece lengths.



Mechanical cut stop for the material identification.



Easy operation and programming via touchscreen.

**KKS 451 NA** can be left unattended. The automatic mitre saw for profiles and solid materials executes the tasks by itself. The servo motor and the screw ball assure a highly precise material supply. The optional CNC-controlled rotary table sets the mitring exactly and creates a twometer stroke length in one movement. The cutting speed and the feed rate are calculated automatically.

### ADVANTAGES AT A GLANCE

- ▶ Automatic processing of flat, angular and solid materials as well as of tubes and special profiles
- ▶ Automatic material supply via the supply gripper with a single stroke length of 2000 mm and up to 9999 mm in multi stroke
- ▶ CNC-controlled rotary table for mitre cuts, range 120°
- ▶ Graphical operating surface with touchscreen and PROFICUT Software
- ▶ Automatic calculation of the cutting speed and of the saw feed rate
- ▶ Removal roll rail to push the cut parts
- ▶ Flexible material feed from the left, or optionally from the right side

### APPLICATIONS

- ▶ Metal fabrication
- ▶ Stair construction
- ▶ Machine construction
- ▶ Transport and storage systems
- ▶ Vehicle construction
- ▶ Supplier industry
- ▶ We are looking forward talking to you regarding your specific applications and requirements.



Saw cut material bar.

# KKS 463 NA

## UNIVERSAL UNATTENDED MANUFACTURING



**HIGHEST DEMANDS  
FULFILLED SAFELY**

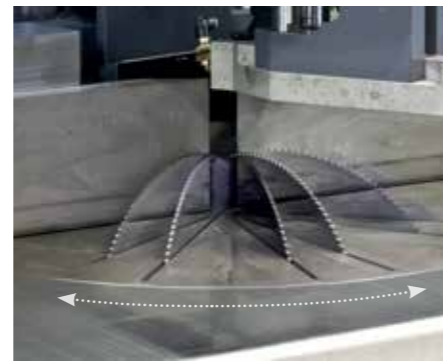
Components manufactured with a KALTENBACH machine.



Swiveling vertical clamping device for mitre cuts for optimal material clamping and shortest remnant parts length (< 15 mm).



Laser light barrier for the cut identification.



CNC-controlled rotary table for mitre cuts.



KKS 463 NA



Saw cut material bar.



Offcut gripper for cut piece clamping during the saw cut, as well as for the sorting of offcuts/residual parts and good parts to pre-adjustable positions.

### ADVANTAGES AT A GLANCE

- ▶ Automatic processing of profile and solid materials as well as of tubes
- ▶ Automatic material supply via infeed gripper and measuring offcut gripper, single stroke length 1500mm and 9999mm in multi-stroke
- ▶ CNC-controlled rotary table for mitre cuts, range 120°
- ▶ Graphical operating surface with touchscreen and PROFICUT Software
- ▶ Automatic calculation of the cutting speed and of the saw feed rate
- ▶ Automatic cut sorting to pre-adjustable positions
- ▶ Multiple cuts on the front and back side
- ▶ Flexible material feed from the left and optionally from the right
- ▶ Long stroke clamping cylinder and therefore omission of set-up times
- ▶ Vertical drill axis for an automatic drill-/saw operation
- ▶ Continuous one-part machine case in welded execution



Free standing control panel for the ergonomic set-up in front of the machine.



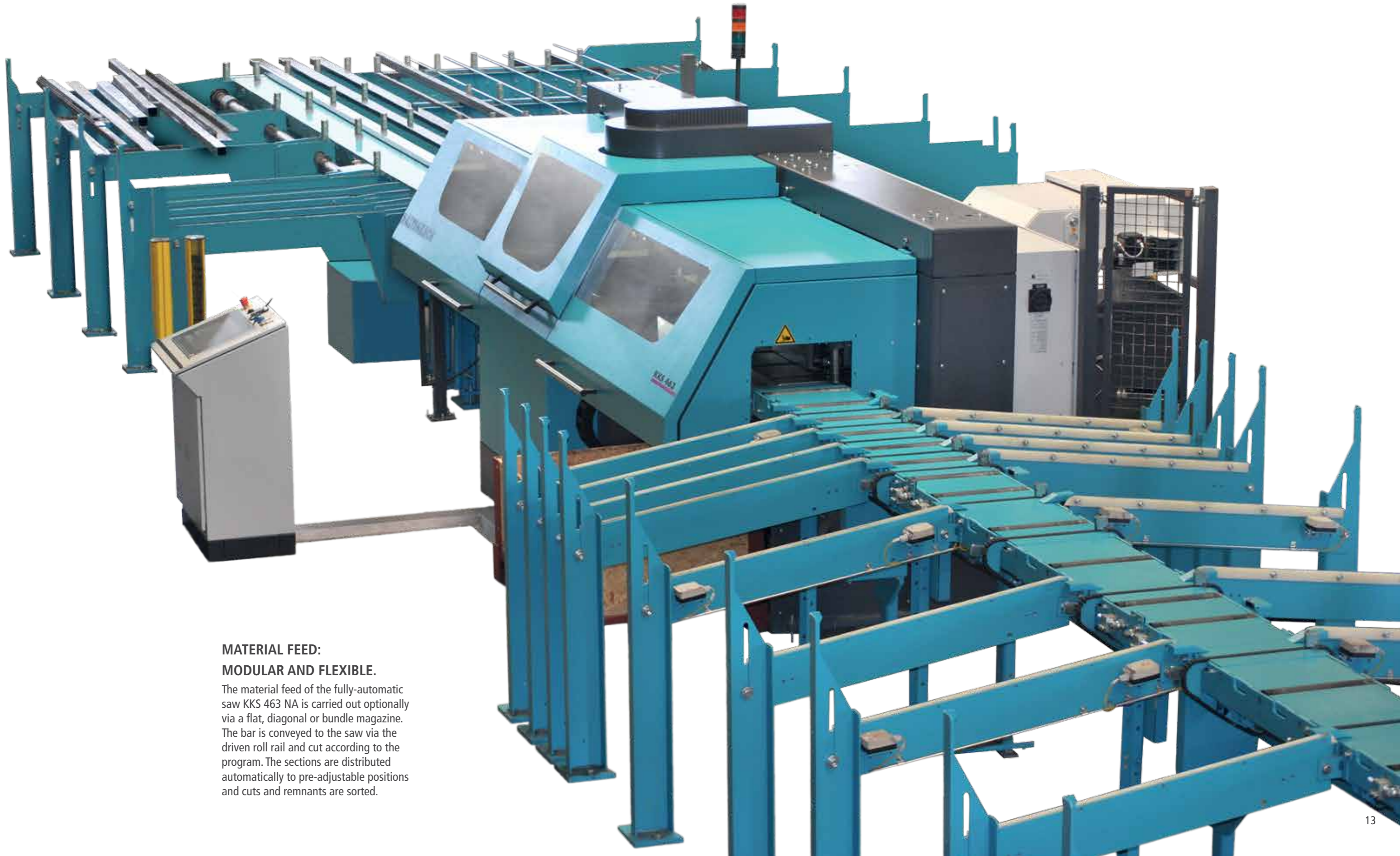
Integrated brush system for the removal of swarf, first cuts/residuals and gussets.



Highly precise positioning of the material via ball screw with brush-less servo motors. Guiding of the supply carriage on robust, maintenance free linear bearings.

# KKS 463 NA

WITH INFEEED AND REMOVAL



## **MATERIAL FEED: MODULAR AND FLEXIBLE.**

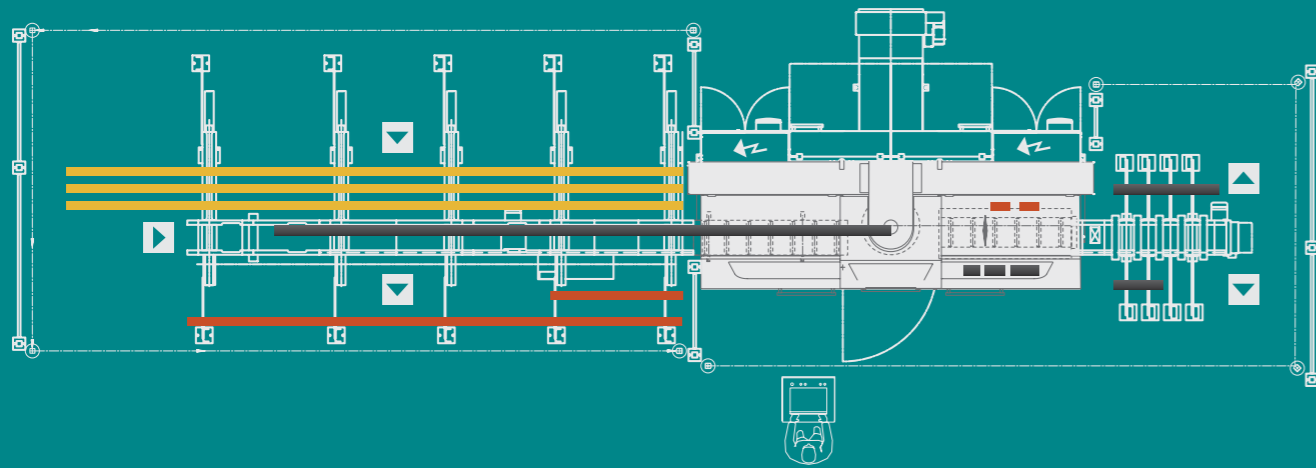
The material feed of the fully-automatic saw KKS 463 NA is carried out optionally via a flat, diagonal or bundle magazine. The bar is conveyed to the saw via the driven roll rail and cut according to the program. The sections are distributed automatically to pre-adjustable positions and cuts and remnants are sorted.

# FEED VARIANTS

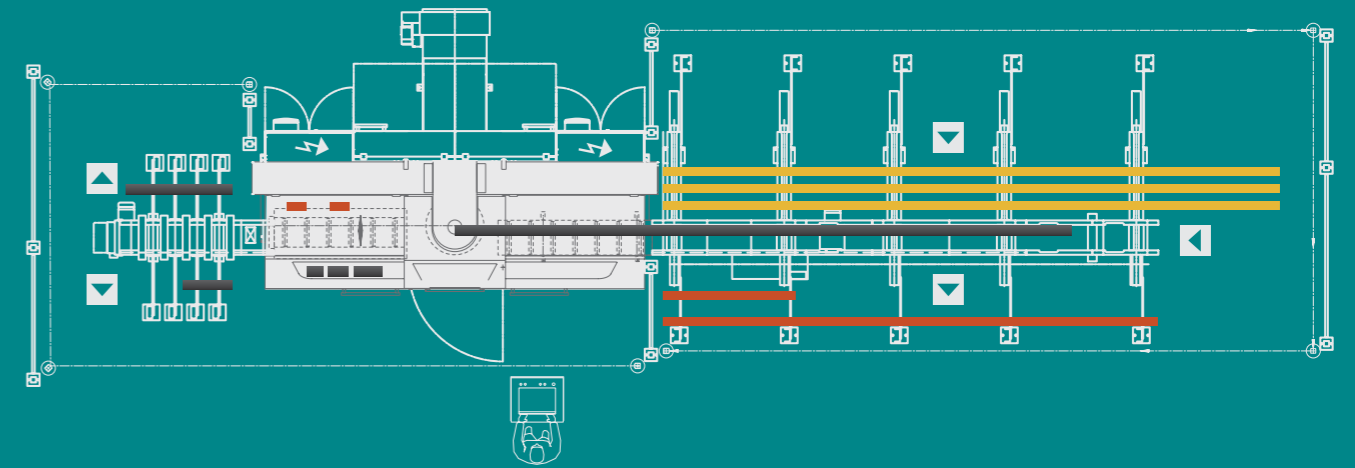
KKS 463 NA

- Material to be cut
- Bar in processing/Good Parts
- Remnant pieces

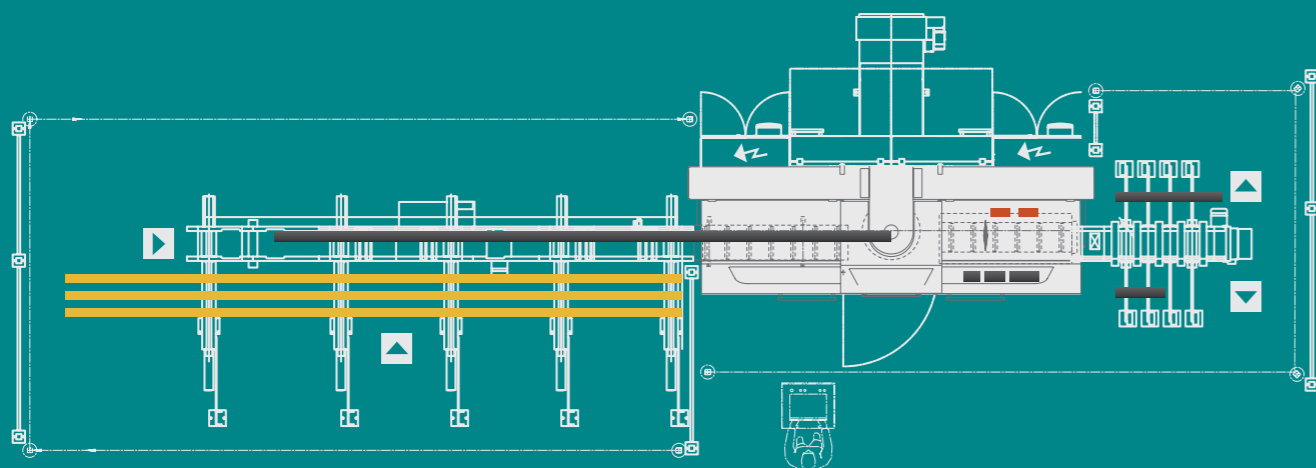
Material feed from the back side left



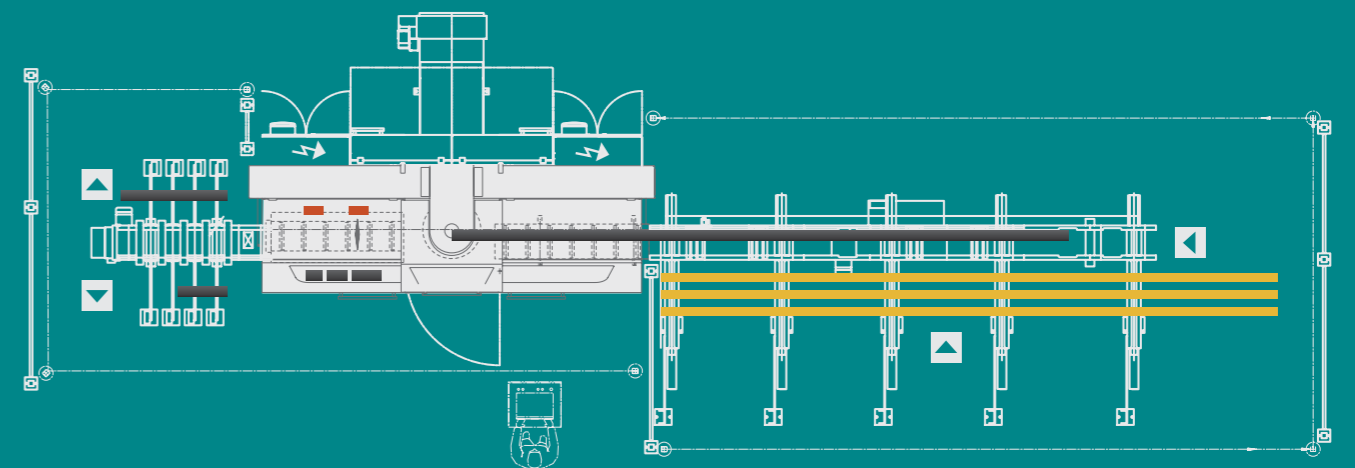
Material feed from the back side right



Material feed from the front side left



Material feed from the front side right





# OPTIONAL REMOVAL UNITS

KKS 463 NA



**1** Tipping roll rail  
Sections can be adjusted flexibly to various positions via „teach in“.



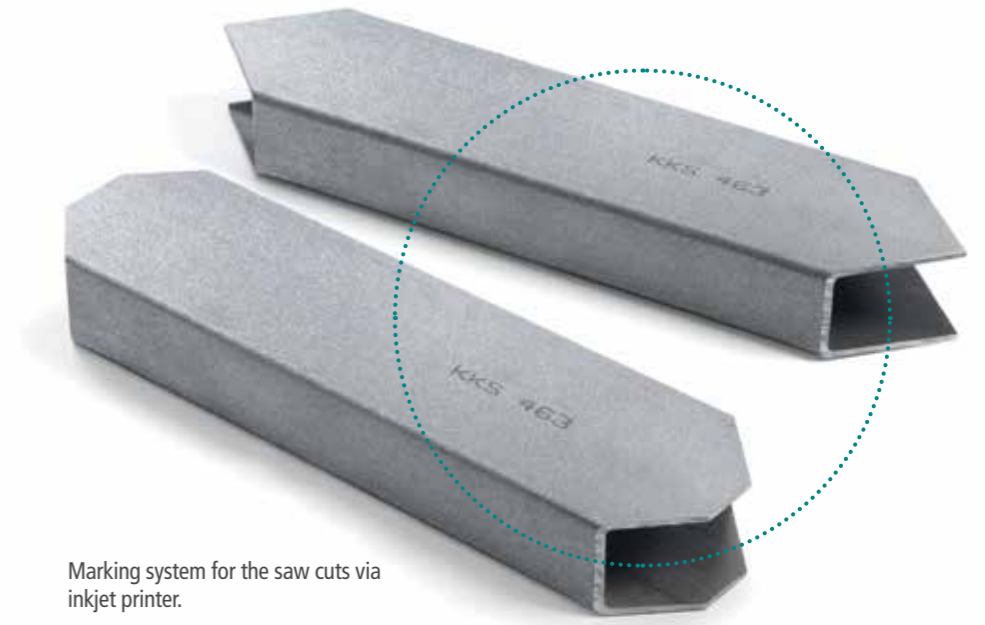
**2** Section cross distributor with cross beating chains for automatic sorting of cuts forwards and backwards.



**3** Automatic lowering belt troughs for the support of sections.

# ACCESSORIES

KKS 463 NA



Marking system for the saw cuts via inkjet printer.



Coolant atomizer system.



Material width measuring with automatic length correction for precise mitre cuts.

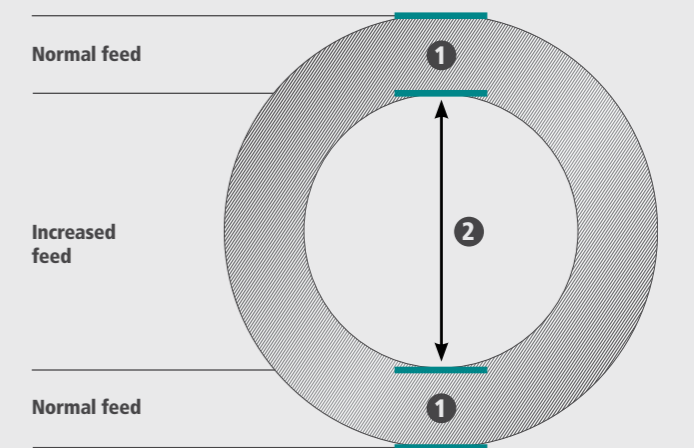


Slat-band chain conveyor for the automatic removal of swarf, cuts/remnants and gussets.



Automatic program controlled clamping pressure reduction via proportional valves for the processing of thin wall tubes and special profiles.

Dynamic feed regulation for the reduction of cutting times.



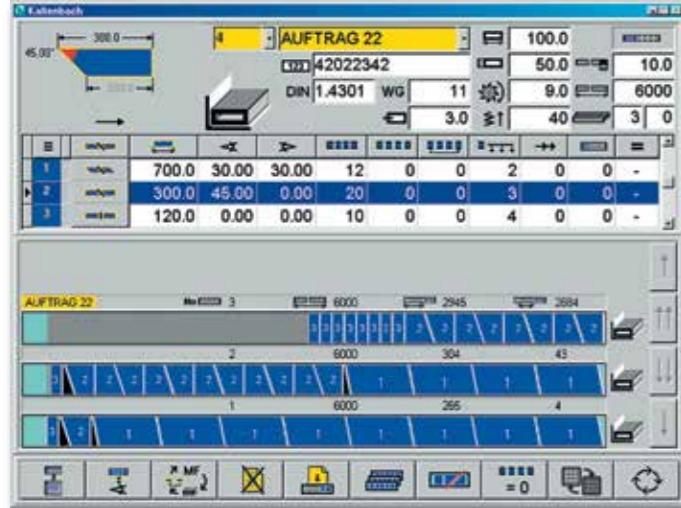
**1** Normal feed **2** Increased feed

# PROFICUT – SOFTWARE FOR PROFIS

KKS 451 NA | KKS 463 NA

## Bar optimization for optimal use of the raw material

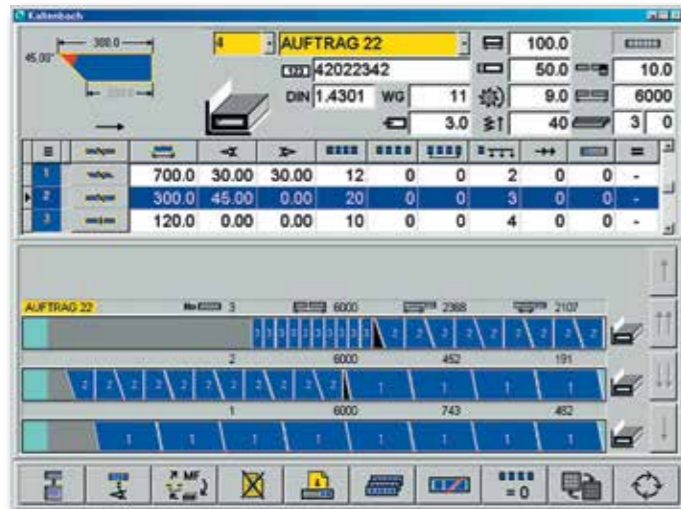
Selection of the processing type:



▶ work piece oriented

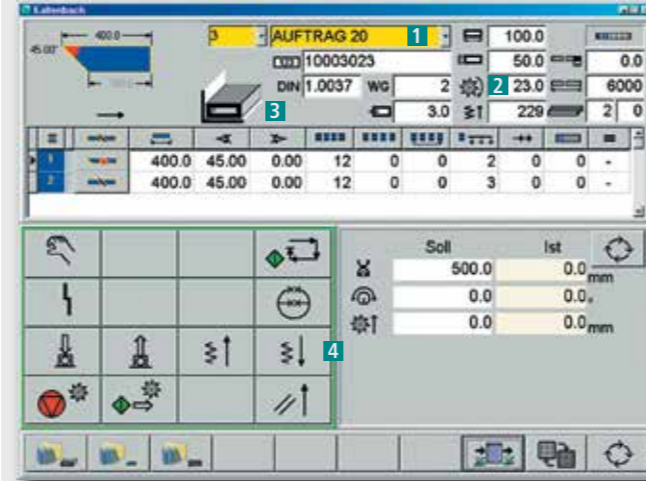


▶ filling oriented

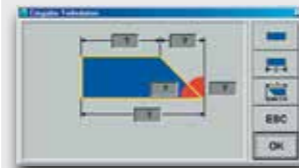


▶ bar oriented

▶ The whole control and programming of KKS 451 NA/KKS 463 NA is carried out via touchscreen over the graphic operating surface PROFICUT under Windows. A connection to the network is possible.



- 1 Storage possibility for as many sawing orders as desired
- 2 Automatic calculation of cutting speed and feed over the material group or DIN-Nr. (steel key).
- 3 Graphical representation of the material
- 4 Machine operation



Adjustment of the work piece input according to the available dimensions



Selection of pre-programmed material shapes

CUSTOMER LEVEL

- ▶ Customer software that can export CAD files in DSTV format or CSV format (Excel)
- ▶ PROFICUT additional license (optional) for the registration of the sawing orders in the office PC

Data transfer via network or data medium.

Machine PC with graphic touch screen operating panel under Windows. Software; PROFICUT for the reading in of CAD data, resp. of the data from the PROFICUT office license and for the direct data input into the machine.

MACHINE CONTROL LEVEL

### Input functions:

- ▶ As many sawing orders as needed
- ▶ Multi-Tasking operation
- ▶ Input of parts dimensions on the graphically represented part

### Visualization:

- ▶ Machine operating keys
- ▶ Graphical representation of the cross cut
- ▶ Graphical representation of parts shapes
- ▶ Preliminary calculation and graphical representation of the table assignment
- ▶ Process visualization
- ▶ Automatic calculation of the optional cutting and feed speed

### Material database:

- ▶ Storage of material data under a freely selectable material identification number

### Parts database:

- ▶ Storage of saw parts under a freely selectable parts identification number

### Remote diagnosis:

- ▶ Via telephone line or internet (Team Viewer)

### Orders management:

- ▶ Programming/management of sawing orders under an order number
- ▶ Input/processing of various materials under one order
- ▶ Input/processing of various material lengths

MACHINE LEVEL

▶ Execution of the sawing cut



# MATERIAL FEED

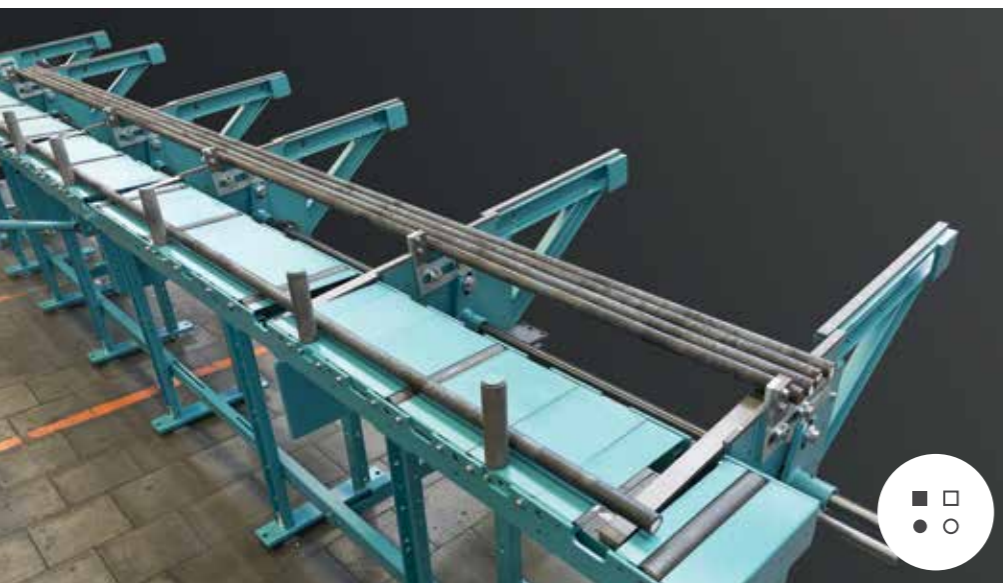
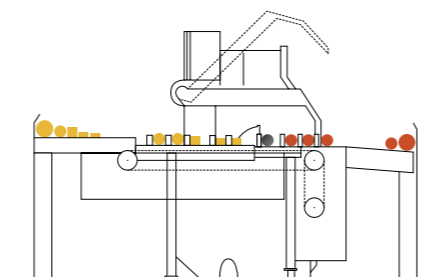
KKS 400 NA | KKS 451 NA | KKS 463 NA



- Material to be cut
- Bar in processing
- Remnant pieces

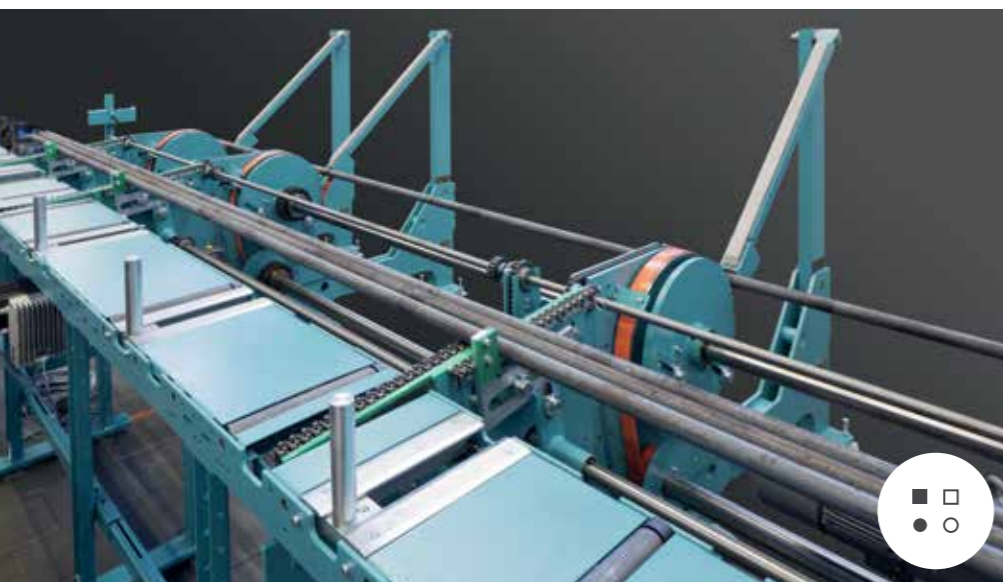
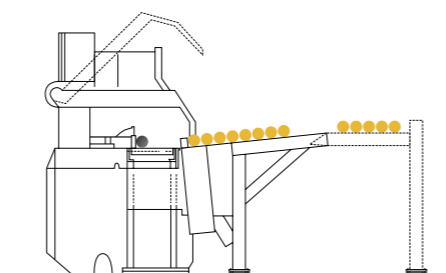
## FLAT MAGAZINE FM 1

For the pre-storage of round and square material as well as profiles (also special profiles).



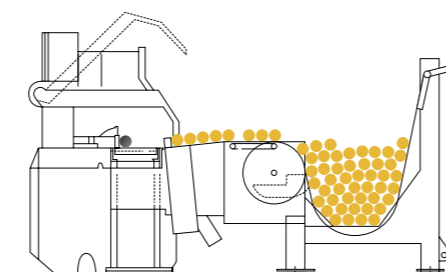
## DIAGONAL MAGAZINE LM 1

For the pre-storage of round and square material.



## BUNDLE MAGAZINE VM

For the pre-storage of round and square material.



# KKS SERIES AT A GLANCE

| HARD FACTS                      | KKS 400 NA   | KKS 451 NA                                | KKS 463 NA                   |
|---------------------------------|--|---|------------------------------|
| Saw blade Ø                     | 400 mm   | 450 mm                                    | 460 mm                       |
| Drive performance               |  |   |                              |
| – standard                      | 1,8/2,7 kW   | 1,8/2,7 kW                                | 5,2 or 9,5 kW                |
| – optional                      | 3,7/4,7 kW   |   |                              |
| – optional frequency-c.         | 4 kW   | 4 bzw. 5,5 kW                             |                              |
| Conveying hydraulic performance | 25 l/min   | 25 l/min                                  | 25 l/min                     |
| Cutting speed                   |  |   |                              |
| – standard                      | 10/20 m/min<br>13/26 m/min<br>15/30 m/min<br>30/60 m/min | 10/20 m/min<br>13/26 m/min<br>15/30 m/min | 7 – 60 or<br>15 – 120 m/min  |
| – optional                      |  |   |                              |
| – optional frequency-c.         | 7 – 43 or<br>20 – 95 m/min                               | 7 – 43 or<br>15 – 75 m/min                |                              |
| Stroke length supply automate   |  |   |                              |
| – single stroke                 | 1.000 mm   | 2.000 mm                                  | 3.000 mm (with interruption) |
| – multi stroke                  | 9.999 mm   | 9.999 mm                                  | 9.999 mm                     |
| Saw blade feed rate             |  |   |                              |
| – steplessly adjustable         | 0–1.000 mm/min   | 0–1.000 mm/min                            | 0–1.000 mm/min               |
| – fast return stroke            | 3.300 mm/min   | 3.500 mm/min                              | 3.500 mm/min                 |
| Dimensions                      |  |   |                              |
| – length                        | 2.340 mm   | 3.300 mm                                  | 4.610 mm                     |
| – width                         | 1.300 mm   | 1.420 mm                                  | 1.940 mm                     |
| – height                        | 1.805 mm   | 2.100 mm                                  | 2.055 mm                     |
| Weight                          | 1.700 kg   | 2.120 kg                                  | 4.900 kg                     |
| Working height                  | 1.040 mm   | 1.040 mm                                  | 1.040 mm                     |
| Swivel range for mitre cuts     | 180°   | 120°                                      | 120°                         |
| Working range                   |  |   |                              |
| ● ○ (round) 90°                 | 130 mm   | 150 mm                                    | 153 mm                       |
| ● ○ (round) 45°                 | 130 mm   | 150 mm                                    | 145 mm                       |
| ■ □ (square) 90°                | 120 mm   | 140 mm                                    | 140 mm                       |
| ■ □ (square) 45°                | 110 mm   | 130 mm                                    | 125 mm                       |
| ■ □ (flat) 90°                  | 305 x 20 mm  | 240 x 80 mm                               | 250 x 75 mm                  |
| ■ □ (flat) 45°                  | 245 x 30 mm  | 185 x 60 mm                               | 180 x 70 mm                  |

| FEATURES   | KKS 400 NA | KKS 451 NA | KKS 463 NA |
|--|------------|------------|------------|
| Material feed from the right side                  | –          | ○          | ○          |
| Hydraulic horizontal clamping device removal side  | ○          | ●          | –          |
| Dynamic saw blade feed                             | –          | ○          | ○          |
| Minimal lubrication                                | ○          | ○          | ○          |
| Coolant atomizer system                            | ●          | ●          | ●          |
| CNC-controlled cut angle setting                   | –          | ○          | ●          |
| Label printer for cut labelling                    | –          | ○          | ○          |
| Inkjet printer for cut marking                     | –          | –          | ○          |
| Graphical touchscreen operating surface            | –          | ●          | ●          |
| Cut stop   | ○          | ○          | ○          |
| Multiple front and rear cuts                       | –          | –          | ○          |
| Automatic material width measuring                 | –          | –          | ○          |
| Manual pressure reduction                          | ●          | ●          | ●          |
| Automatic tension pressure reduction               | –          | –          | ○          |
| Swarf conveyor                                     | ○          | ○          | ○          |
| Slat-band chain conveyor f. cuts/residuals/gussets | –          | –          | ○          |
| Automatic cut sorting unit ABG                     | –          | –          | ●          |
| Cut cross distribution ABQ                         | –          | –          | ○          |
| Tipping roll rail for long saw cuts                | –          | –          | ○          |
| Vertical drilling axis                             | –          | –          | ○          |
| Feed magazines                                     | ○          | ○          | ○          |

● = standard ○ = optional – = not applicable

# KALTENBACH TECHNICAL SERVICES

## SERVICE YOU CAN RELY ON.



KALTENBACH and KALTENBACH partners offer help and advice, 365 days a year and all around the globe. Whether you want to buy machines or parts, whether you need tools, equipment or maintenance – we'll be there for you.

We are aiming at offering the best possible service by thinking, feeling and acting like you. And you can help us making our service even better.

Please talk to us, whatever you need.

▶ [feedback@kaltenbach.de](mailto:feedback@kaltenbach.de)



### ▶ Spare Parts – Original Quality

OUR SPECIALISTS RESPOND, IDENTIFY AND ACT – AS SPEED IS OF THE ESSENCE.

#### ONLY THE BEST – ONLY ORIGINALS.

KALTENBACH and KALTENBACH partners offer you experience and knowledge. They understand your business and offer you all the products you need for safe operation: the right spare parts, the right tools, the right coolants.

After our field service or help desk will determine the best solution for you, our spare parts specialists will take care of rapid delivery. We understand that in production, time is money – that's why our original parts service will help you save both.

Want to help us get even better?  
Talk to us here:  
[feedback@kaltenbach.de](mailto:feedback@kaltenbach.de)

### ▶ Field Service

SAVING TIME AND REDUCING COSTS ARE THE HIGHEST PRIORITIES IN PRODUCTION. WITH US, YOU'LL ACHIEVE BOTH OF THEM.

#### WE THINK ABOUT YOU, EVEN IF WE'RE NOT WITH YOU.

Knowledge, experience and passion to support our customers makes our service powerful. Dedicated people, close to you with empathy ability in your work so you move forward.

If necessary, our field service engineers will be at your site in short time. Highly qualified, they identify and act to find the best possible solution together with you. Service, maintenance and aftersales advice complete the package for you – service you can rely on.

### ▶ Competence Centre

HOW CAN WE HELP YOU? WITH OUR PASSION FOR FINDING SOLUTIONS.

#### ▶ HELP DESK – WE ARE ALWAYS STANDING BY.

Helping you as quickly as possible is the number one priority of our help desk. Providing professional support worldwide, our qualified customer service team is there to support and assist you with any machine issues and technical queries.

While our experience shows that 90 % of all service enquiries can be resolved over the phone or via on-line support, we are happy to arrange an engineers visit to your site, whenever the need arises.

#### ▶ KALTENBACH ACADEMY

Nothing feels as good as getting better.

We support you in improving and updating your knowledge of the machines to maximise your performance. In the KALTENBACH Academy, our seasoned professionals offer you Customer Training and Consultancy, specifically configured and prepared to suit your industry and application.

#### WE PROVIDE:

- ▶ a highly efficient logistics network in over 40 countries
- ▶ original spare parts directly from the manufacturer
- ▶ market oriented prices
- ▶ professional advice geared to your specific needs
- ▶ coordination of rapid delivery to your location
- ▶ consultation regarding preventive maintenance

#### PROFESSIONALS WORLDWIDE TAKE CARE OF:

- ▶ individual, tailored contract terms and maintenance schemes
- ▶ troubleshooting
- ▶ service
- ▶ updates
- ▶ machine relocations
- ▶ machine changes / upgrades

#### SERVICE TEAM MEMBERS WILL:

- ▶ provide you with technical support in case of machine disruptions with the goal of minimising machine downtime
- ▶ provide you with first-time fix or initiate on site assistance
- ▶ be responsible for keeping you updated about the problem solving processes

#### EXPERTS PROVIDE YOU WITH:

- ▶ product training/instructions
- ▶ safety training
- ▶ preventive maintenance training
- ▶ maintenance instructions
- ▶ internal partner audits
- ▶ consultancy (machine operating efficiency, logistics, tools and consumables)

# KALTENBACH IS FINDING THE RIGHT SOLUTION. MAYBE IT IS ALREADY THERE.

Big and diverse challenges are waiting in the metal and processing industries. To meet them, one needs systems which are powerful, highly versatile and perform efficiently in the long term. Our machines are guaranteeing the right solution for any requirement – safe effective and reliable:

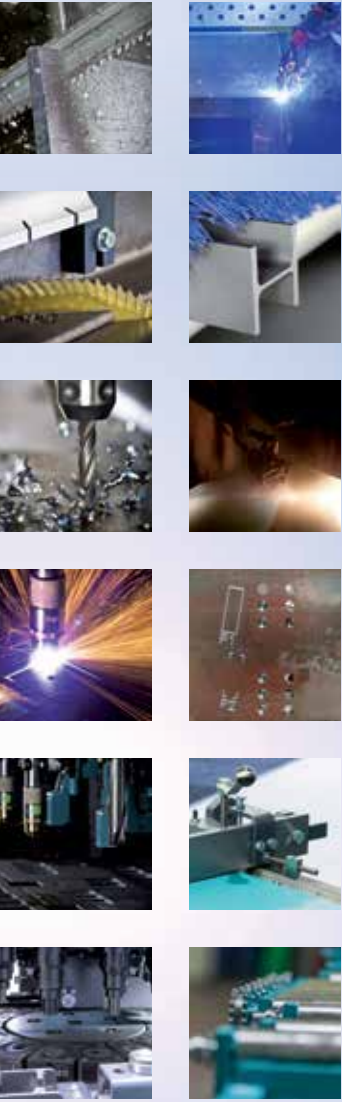
- ▶ BAND AND CIRCULAR SAWING MACHINES
- ▶ DRILL-SAW-LINES
- ▶ PROFILE DRILLING MACHINES
- ▶ PROFILE PROCESSING ROBOTS
- ▶ DRILL-BURN-LINES
- ▶ PUNCHING AND SHEARING SYSTEMS
- ▶ PLATE PROCESSING CENTRES
- ▶ SHOTBLAST SYSTEMS
- ▶ PAINTING SYSTEMS
- ▶ MARKING SYSTEMS
- ▶ MEASURING SYSTEMS
- ▶ TRANSPORT SYSTEMS

For further information and our foreign affiliates please visit:

**[WWW.KALTENBACH.COM](http://WWW.KALTENBACH.COM)**

Product videos:

**[WWW.YOUTUBE.COM/KALTENBACHGROUP](http://WWW.YOUTUBE.COM/KALTENBACHGROUP)**



**KALTENBACH GMBH + CO. KG**

Blasiring 4

D-79539 Lörrach

phone: +49 7621/175 - 0

e-mail: [info@kaltenbach.de](mailto:info@kaltenbach.de)

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

POWERFUL SOLUTIONS –  
PASSIONATE PEOPLE



**KALTENBACH**

## THE RELIABLE ALLROUNDERS.

**THE KKS SERIES**  
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## SEMI-AUTOMATIC UNIVERSAL MITRING CIRCULAR SAWS

The experience, expertise and innovation of KALTENBACH are making the KKS series the reliable allrounders.

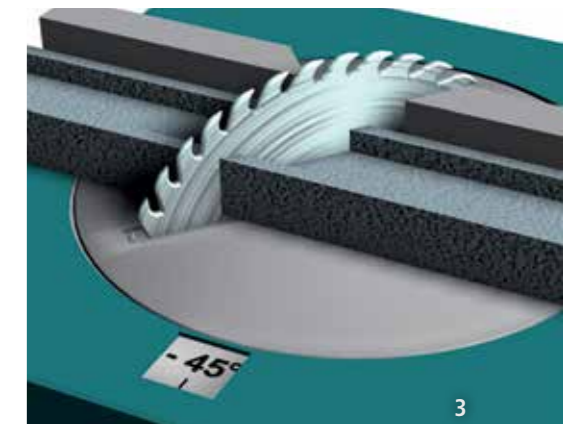
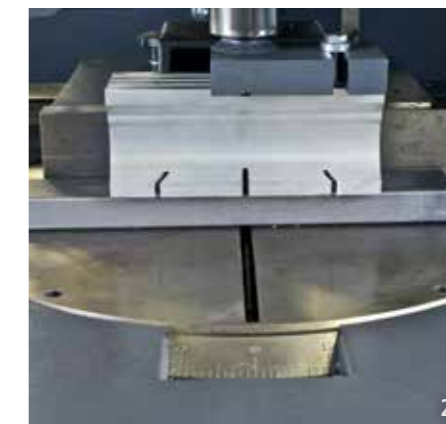
All machines of the KKS series are original universal mitring circular saws. Thus, solid materials can be sawn with the same performance as tubes and profiles.

### ADVANTAGES AT A GLANCE

- ▶ Clamping, sawing, reverse motion, opening – at the touch of a button
- ▶ Suitable for single cuts and the processing of batches
- ▶ Push-button adjustment of the cutting height
- ▶ User-friendly electronic control directly on the machine
- ▶ Good accessibility for saw blade changes and maintenance work
- ▶ Space saving installation
- ▶ Work piece stop and clamping on both sides of the saw blade (stable contact surface for precise cuts)
- ▶ Suitable for nearly all types of profiles and solid materials as well as differing steel grades

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- 1 Heavy duty gear box with hardened and ground, helical gears
- 2 Material clamping on both sides of the saw blade
- 3 Rotary table for mitre cuts, swivel range 180°



# KKS 400 U | KKS 450 U

CLAMPING, SAWING, REVERSE MOTION, OPENING – AT THE TOUCH OF A BUTTON.



**ABSOLUTE VERSATILITY  
WITH A POWERFUL APPEARANCE.**



KKS 400 U



Horizontal clamping device on the right and/or left of the saw blade (option).



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.



Easy and fast operation via push-button. Hydraulic saw blade feed, infinitely variable according to table.



Visual feed control for machining pipes and solid material (optional).

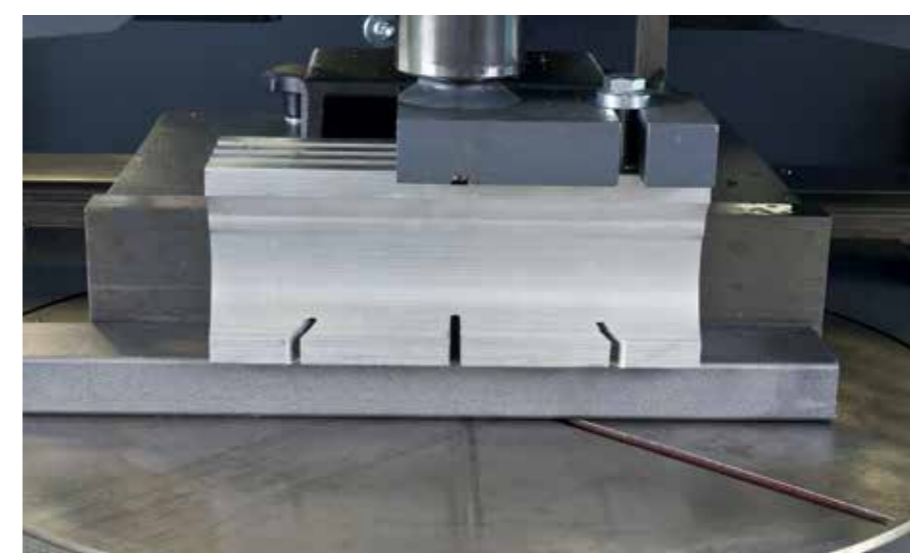


Long-stroke clamping cylinder.

The models **KKS 400 U** and **KKS 450 U** are representing semi-automatic universal mitre circular saws, which are especially suitable for single cuts and processing of small batches.

## ADVANTAGES AT A GLANCE

- ▶ Saw blade Ø up to 450 mm
- ▶ Mitre adjustment 180°
- ▶ Clamping, sawing, reverse motion, opening – 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



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



Digital display of cutting angle.

# KKS 450 H | KKS 400 DH

HIGH PERFORMANCE AND GREATER EASE OF USE.



**RESPONSIVE OPERATION – TARGETED PERFORMANCE.**



KKS 450 H



Horizontal clamping device on the right and/or left of the saw blade (option).



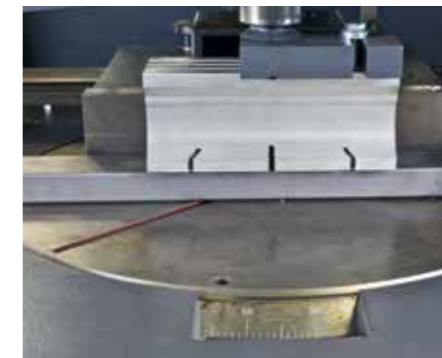
Minimum quantity lubrication optionally available in addition to water cooling for near-dry machining.



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



Work piece stop and clamping on both sides of the saw blade.



CNC-controlled cutting angle setting (option).



Input and diagnostic panel for the operating and programming.

In comparison with the KKS 400/450 U series, the **KKS 450 H** can be semi-automated and offers a higher level of operator convenience.

## DIFFERENCES IN THE SERIES KKS 400 U | KKS 450 U

- ▶ CNC-controlled cutting angle setting (optional, only KKS 450 H)
- ▶ Input panel for saw operation
- ▶ Automatic sawing in combination with L 41 P pusher plate (see page 12)



KKS 400 DH

## 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.

# KKS 400 T | KKS 450 T

THE SPECIALIST FOR JIG WORK.

STEPLESSLY VARIABLE.  
ALWAYS AT YOUR SIDE.



# KKS 450 R

DYNAMIC MASTERING OF JIG WORK.

WORK FLEXIBLY.  
SAW SAFELY.



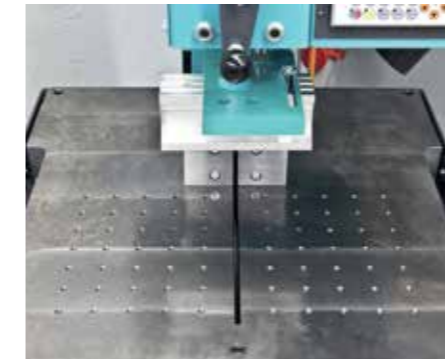
Two-handed operation instead of protection cover.



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



Input and diagnostic panel for operating and programming.



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.



Input and diagnostic panel for operating and programming.

The KKS 400/450 T has been developed for the special requirements of jig work, for example in the exhaust pipe industry or hydroforming. The table can be rotated within a 180° radius for mitre cuts.

## ADVANTAGES 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

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.

## ADVANTAGES 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

# 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 41 NC and T3 infeed conveyor system.



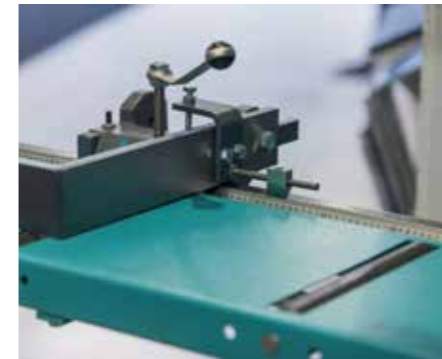
**T3 feed conveyor**  
Robust design, extendable by 1,000 mm.



**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.



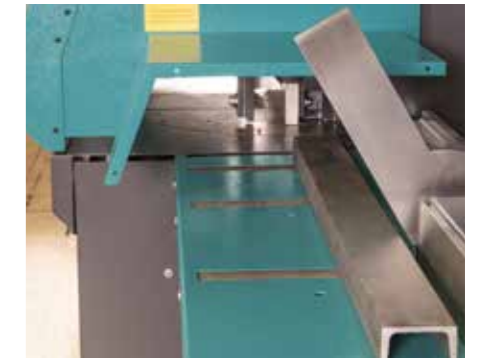
**L 45 I length measurement device**  
The stop is moved using a handwheel; the clamp is operated hydraulically by a hand valve. Digital length display.



**L 41 NC length measurement device**  
For the electronic adjustment of the measuring length via NC-control.



**Touchscreen**  
For easy operation and programming.



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



**L 41 P automatic material infeed gripper and length stop**  
Can be used as length stop or pusher plate.

# TRANSPORT AND MEASURING SYSTEMS



# KKS SERIES AT A GLANCE

| HARD FACTS                  | KKS 400 U                                 | KKS 450 U                                 | KKS 450 H                                 | KKS 400 DH                                | KKS 400 T      | KKS 450 T      | KKS 450 R              |
|-----------------------------|---|---|---|---|----------------|----------------|------------------------|
| Saw blade Ø                 | 400 mm                                    | 450 mm                                    | 450 mm                                    | 400 mm                                    | 400 mm         | 450 mm         | 450 mm                 |
| Drive performance           |   |   |   |   |                |                |                        |
| – standard                  | 1.8/2.7 kW                                | 1.8/2.7 kW                                | 1.8/2.7 kW                                | 1.8/2.7 kW                                | 4.0 kW         | 5.5 kW         | 1.8/2.7 kW             |
| – optional                  | 3.7/4.5 kW                                | 3.7/4.5 kW                                | 3.7/4.5 kW                                | 3.7/4.5 kW                                |                |                | 3.7/4.5 kW             |
| – optional frequency-c.     | 4.0 kW                                    | 4.0 or 5.5 kW                             | 4.0 or 5.5 kW                             | 4.0 kW                                    |                |                | 4.0 or 5.5 kW          |
| Cutting speed               |   |   |   |   |                |                |                        |
| – standard                  | 10/20 m/min<br>13/26 m/min<br>15/30 m/min | 10/20 m/min<br>13/26 m/min<br>15/30 m/min | 10/20 m/min<br>13/26 m/min<br>15/30 m/min | 10/20 m/min<br>13/26 m/min<br>15/30 m/min | 20-95 m/min    | 15-75 m/min    | 15/30 m/min            |
| – optional                  | 30/60 m/min                               | 35/70 m/min                               | 35/70 m/min                               | 30/60 m/min                               |                |                | 35/70 m/min            |
| – optional frequency-c.     | 7-43 or<br>20-95 m/min                    | 7-43 or<br>15-75 m/min                    | 7-43 or<br>15-75 m/min                    | 7-43 or<br>20-95 m/min                    |                |                | 7-43 or<br>15-75 m/min |
| Saw blade feed rate         |   |   |   |   |                |                |                        |
| – steplessly adjustable     | 0-1,000 mm/min                            | 0-1,000 mm/min                            | 0-1,000 mm/min                            | 0-1,000 mm/min                            | 0-1,000 mm/min | 0-1,000 mm/min | 0-1,200 mm/min         |
| – fast return stroke        | 3,300 mm/min                              | 3,300 mm/min                              | 3,300 mm/min                              | 3,300 mm/min                              | 3,300 mm/min   | 3,300 mm/min   | 3,300 mm/min           |
| Dimensions                  |   |   |   |   |                |                |                        |
| – length                    | 1,050 mm                                  | 1,305 mm                                  | 1,305 mm                                  | 3,000 mm                                  | 1,050 mm       | 1,305 mm       | 1,260 mm               |
| – width                     | 900 mm                                    | 1,020 mm                                  | 1,020 mm                                  | 900 mm                                    | 900 mm         | 1,020 mm       | 900 mm                 |
| – height                    | 1,840 mm                                  | 2,000 mm                                  | 2,000 mm                                  | 1,840 mm                                  | 1,840 mm       | 2,000 mm       | 1,920 mm               |
| Weight                      | 850 kg                                    | 1,050 kg                                  | 1,050 kg                                  | 1,700 kg                                  | 850 kg         | 1,050 kg       | 1,150 kg               |
| Working height              | 1,010 mm                                  | 1,010 mm                                  | 1,010 mm                                  | 1,010 mm                                  | 1,010 mm       | 1,010 mm       | 1,050 mm               |
| Swivel range for mitre cuts | 180°                                      | 180°                                      | 180°                                      | 180°                                      | 180°           | 180°           | –                      |
| Working range               |   |   |   |   |                |                |                        |
| ●○ (round) 90°              | 130 mm                                    | 150 mm                                    | 150 mm                                    | 130 mm                                    | 130 mm         | 150 mm         | 140 mm                 |
| ●○ (round) 45°              | 130 mm                                    | 150 mm                                    | 150 mm                                    | 130 mm                                    | 130 mm         | 150 mm         | –                      |
| ■□ (square) 90°             | 120 mm                                    | 140 mm                                    | 140 mm                                    | 120 mm                                    | –              | –              | 130 mm                 |
| ■□ (square) 45°             | 110 mm                                    | 130 mm                                    | 130 mm                                    | 110 mm                                    | –              | –              | –                      |
| ■□ (flat) 90°               | 305 x 20 mm                               | 330 x 40 mm                               | 330 x 40 mm                               | 305 x 20 mm                               | –              | –              | 330 x 40 mm            |
| ■□ (flat) 45°               | 245 x 30 mm                               | 250 x 40 mm                               | 250 x 40 mm                               | 245 x 30 mm                               | –              | –              | –                      |

| FEATURES   | KKS 400 U | KKS 450 U | KKS 450 H | KKS 400 DH | KKS 400 T | KKS 450 T | KKS 450 R |
|--|-----------|-----------|-----------|------------|-----------|-----------|-----------|
| Hydraulic vertical long-stroke clamping cylinder                     | ●         | ●         | ●         | ●          | ●         | ●         | ●         |
| Hydr. 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                                     | ●         | ●         | –         | –          | –         | –         | –         |
| Swivelling protection cover  | ●         | ●         | ●         | ●          | ○         | ○         | –         |
| Two-handed operation   | –         | –         | –         | –          | ●         | ●         | ●         |
| Workspace lighting   | ●         | ●         | ●         | ●          | ●         | ●         | ●         |
| Minimal lubrication  | ○         | ○         | ○         | ○          | ●         | ●         | ●         |
| Hydraulic saw blade feed   | ●         | ●         | ●         | ●          | ●         | ●         | ●         |
| Input/Output Roller conveyor T3                                      | ○         | ○         | ○         | ○          | ○         | ○         | –         |
| Length measurement system  | ○         | ○         | ○         | ○          | ○         | ○         | –         |
| NC mitre adjustment  | –         | –         | ○         | –          | –         | –         | –         |
| Saw blade guide rails  | –         | –         | –         | –          | –         | –         | ○         |

● = standard    ○ = optional    – = not applicable

# KDU 250 DRILLING MACHINE

AUTOMATIC SAWING-DRILLING PROCESS

The KDU 250 can be used with both the KKS 450 U ( page 6 ) circular saw or the KBS 400 DG Bandsaw to enable an automated smaller 3 axis Saw/Drill Combination or as a standalone machine .



The KDU 250 drilling machine was designed for the streamlined drilling, centre-marking and thread-cutting of U-, angle and flat steel and hollow sections.



Saw-drill-line  
KKS 450 circular saw with KDU 250.

## KDU 250 DRILLING MACHINE AT A GLANCE



Automatic material feed by means of pusher.



Each axis can be optionally equipped with three tools.



Faster, more precise drill carriage mounted on zero-play, pre-stressed linear guide elements. Ball screw with servomotor for high-precision positioning.

| HARD FACTS             | KDU 250               |
|------------------------|-----------------------|
| Working range min.     | 50 x 20 mm            |
| Working range max.     | 250 x 250 mm          |
| Tools per axis         | 1 (optional 3)        |
| Drilling unit          | 1 (optional up to 4)  |
| Drill diameter         | 6-26 mm               |
| Feed                   | 1,500 mm/min          |
| Rapid feed and return  | 9,000 mm/min          |
| Drive power per axis   | 4 kW                  |
| Spindle speed max.     | 2,000 min-1           |
| Drill type             | HSS                   |
| Dimensions (L x W x H) | 2,000 x 1,375 x 2,500 |
| Weight                 | 2,500 kg              |

| FEATURES                 | KDU 250 |
|--------------------------|---------|
| Vertical drilling axis   | ●       |
| Horizontal drilling axes | ○       |
| Drilling from below      | ○       |
| MK3 rapid tool changer   | ●       |
| Minimal lubrication      | ●       |
| Pull-out swarf tray      | ●       |
| Thread-cutting           | ○       |
| Tool changer             | ○       |
| Infeed magazine          | ○       |
| In-spec parts sorter     | ○       |

● = standard ○ = optional

# KALTENBACH TECHNICAL SERVICES

## SERVICE YOU CAN RELY.



KALTENBACH and our KALTENBACH partners are on hand to advise and assist you worldwide, 365 days a year. Whether you need machines or parts, maintenance or servicing – we are here to help.

We endeavour to provide the best possible service because our thoughts, feelings and actions reflect yours. And you can help us make our service even better.

Please get in touch, anytime.

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



### ▶ Spare parts – Original quality

**OUR SPECIALISTS RESPOND, DIAGNOSE AND ACT - WE UNDERSTAND THAT SPEED IS OF THE ESSENCE.**

#### **ONLY THE BEST - ONLY ORIGINAL PARTS**

KALTENBACH and KALTENBACH partners offer you their experience and knowledge. We understand your business and provide all the products you need to ensure that your processes are safe and reliable: The right parts, the right tools, the right lubricants.

And once our Field Service or Helpdesk has found the best solution for you, we ensure prompt delivery. We are well aware that time is money in production – so our original parts service helps you to save both.

Find your local contact at:  
[www.kaltenbach.com](http://www.kaltenbach.com)

### ▶ Field service

**SAVING TIME AND COSTS ARE THE ULTIMATE PRIORITIES IN PRODUCTION. WITH US, YOU CAN DO BOTH.**

#### **WE THINK ABOUT YOU, EVEN WHEN WE ARE NOT WITH YOU.**

Knowledge, experience and a passionate commitment to support our customers in the best possible way is what makes our service great: Dedicated people close to hand who understand your business so that you can make headway.

Our field service engineers can be called out at very short notice if necessary. These highly qualified technicians will diagnose the problem and actively work with you to find the best solution. Plant maintenance service and aftersales complete the package – service you can rely on.

### ▶ Competence centre

**HOW CAN WE HELP YOU? THROUGH OUR COMMITMENT TO PROBLEM SOLVING.**

#### ▶ HELPDESK – ALWAYS AT THE READY

Our Helpdesk's priority is to help you as quickly as possible. Our skilled customer service team offers professional support throughout the world to help resolve all your machinery problems and technical queries.

Although our experience shows that 90 % of all service enquiries can be handled by telephone or using our online support system, we will gladly arrange a visit from a field service engineer whenever necessary.

#### ▶ KALTENBACH ACADEMY

Nothing feels quite as good as getting better.

We will help you improve your knowledge of the machines and keep it up-to-date to maximise your efficiency. At the KALTENBACH Academy our experienced experts provide customer training and advice tailored to your specific industry and needs.

#### **WE PROVIDE:**

- ▶ a highly efficient logistics network in over 40 countries
- ▶ original parts direct from the manufacturer
- ▶ prices in line with the market
- ▶ professional advice tailored to your needs
- ▶ coordination of delivery to your premises
- ▶ plant maintenance advice

#### **GLOBAL SPECIALISTS IN:**

- ▶ individual, tailored contract terms and maintenance schemes
- ▶ problem-solving
- ▶ service
- ▶ updates
- ▶ machine relocations
- ▶ machine modifications and refits

#### **OUR SERVICE TEAM WILL:**

- ▶ provide technical support in the event of a machine breakdown with the aim of minimising downtime
- ▶ help by providing first-time fixes or organising on-site support
- ▶ keep you informed throughout the problem-solving process

#### **EXPERTS ARE ON HAND FOR:**

- ▶ product training
- ▶ safety training
- ▶ maintenance advice
- ▶ maintenance instructions
- ▶ internal partner audits
- ▶ advice (machine efficiency, logistics, tools and materials)

# KALTENBACH IS FINDING THE RIGHT SOLUTION. MAYBE IT IS ALREADY THERE.

Big and diverse challenges are waiting in the metal and processing industries. To meet them, one needs systems which are powerful, highly versatile and perform efficiently in the long term. Our machines are guaranteeing the right solution for any requirement – safe effective and reliable:

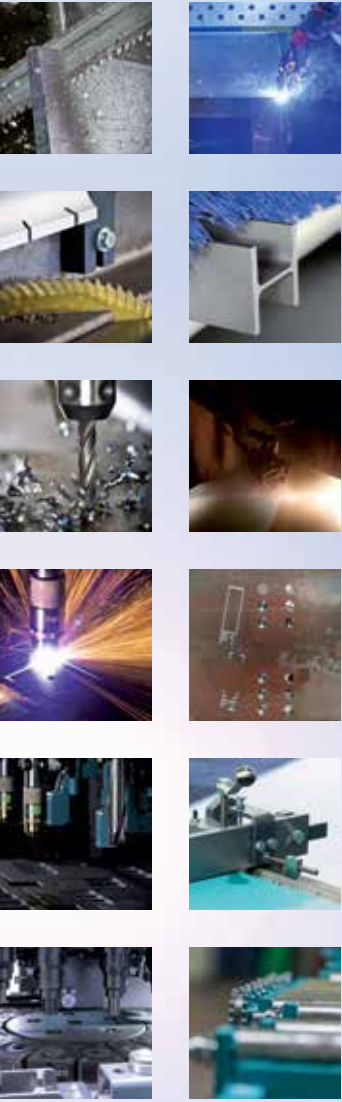
- ▶ BAND AND CIRCULAR SAWING MACHINES
- ▶ DRILL-SAW-LINES
- ▶ PROFILE DRILLING MACHINES
- ▶ PROFILE PROCESSING ROBOTS
- ▶ DRILL-BURN-LINES
- ▶ PUNCHING AND SHEARING SYSTEMS
- ▶ PLATE PROCESSING CENTRES
- ▶ SHOTBLAST SYSTEMS
- ▶ PAINTING SYSTEMS
- ▶ MARKING SYSTEMS
- ▶ MEASURING SYSTEMS
- ▶ TRANSPORT SYSTEMS

For further information and our foreign affiliates please visit:

**[WWW.KALTENBACH.COM](http://WWW.KALTENBACH.COM)**

Product videos:

**[WWW.YOUTUBE.COM/KALTENBACHGROUP](http://WWW.YOUTUBE.COM/KALTENBACHGROUP)**



**KALTENBACH GMBH + CO. KG**

Blasiring 4

D-79539 Lörrach

phone: +49 7621/175 - 0

e-mail: [info@kaltenbach.de](mailto:info@kaltenbach.de)

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



POWERFUL SOLUTIONS –  
PASSIONATE PEOPLE



**KALTENBACH**

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

**SKL + TL SERIES**  
CIRCULAR SAWS FOR ALUMINIUM

 > MADE IN GERMANY

**REQUIREMENTS MAY CHANGE  
OVER TIME.**

**BUT GENUINE QUALITY IS TIMELESS.**



**OVER 130 YEARS' OLD - A  
COMPANY IN ITS PRIME.**

Anyone who produces or processes, saws or drills, welds or flames metal does not do work of a transient nature. They are creating something for the future. And anyone processing such durable materials is best to rely on long-term partnerships.

Reliable partnerships with powerful, premium quality machines which provide a high level of production safety day in, day

out – and trustworthy partnerships with dependable, dedicated individuals who provide long term support.

Lasting values have a long tradition at KALTENBACH. Over 130 years' experience has taught us that working with our customers is the best way to find the right solution.

In this product catalogue you will find information about areas of application, individual components, technical data and special benefits. Help and advice from our staff in Sales, Technical Services and Support are an integral part of KALTENBACH systems.

Whatever your question and wherever you are in the world – we are there for you.

## SAWING SYSTEMS FOR ALUMINUM

KALTENBACH offers a wide range of manual, semi-automatic and fully-automatic circular saws designed specifically for sawing aluminium and aluminium alloys.

### ADVANTAGES AT A GLANCE

- ▶ High drive power for optimum machining
- ▶ Minimum quantity lubrication as standard
- ▶ Highly flexible for straight and mitre cuts
- ▶ Optimal chip flow
- ▶ Reliable workpiece clamping on both sides of the saw blade

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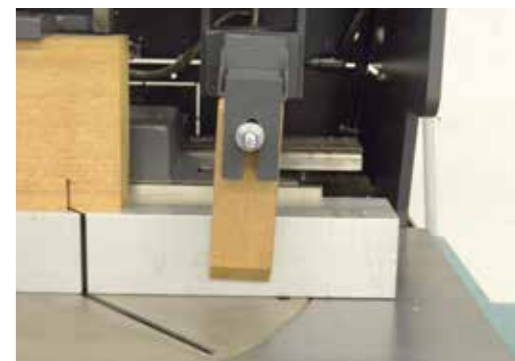
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1



2



3

- 1 Mitre cut.
- 2 Infeed gripper with material.
- 3 Horizontal clamping device. Mitre cut.

**TL 250 | TL 350 | TL 450**  
**IDEAL FOR WORKSHOPS AND CONSTRUCTION SITES**



**PRECISE.  
 PORTABLE.**



TL 450

**SKL 450 E | SKL 450 H**  
**WHEN SEMI-AUTOMATIC IS JUST THE JOB**



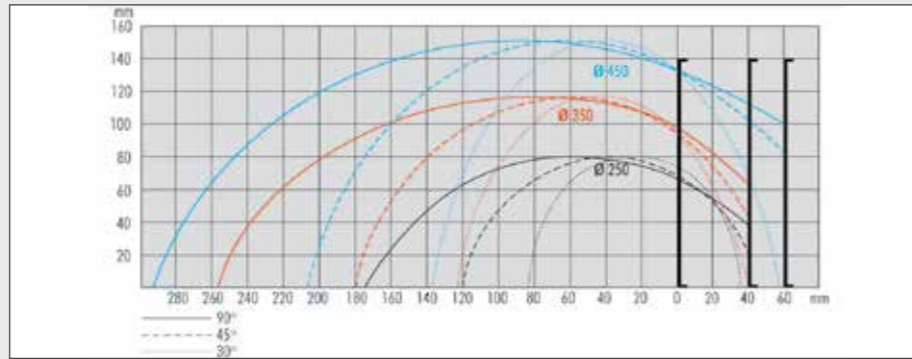
**VERSATILE.  
 DEPENDABLE.**



SKL 450 E



Portable saws – for ease of use in workshops or on-site.



Cutting area.



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



Control panel with illuminated text display (SKL H only).

In the workshop in the morning, on site in the afternoon – the portable aluminium saws in the TL range can easily be transported from one place to another. Available in three sizes, they are suitable for straight and mitre cuts. A hand-operated lever is used to raise the saw blade and cut the material with speed and precision.

**ADVANTAGES AT A GLANCE**

- ▶ Work safely at workbench or workstation
- ▶ Cuts from below for accurate, safe operation
- ▶ Fast setting for mitre cuts
- ▶ Adjustable workpiece stop to extend cutting area
- ▶ Saw blade guard, electrical overload protection and no-voltage release
- ▶ Workpiece clamping with adjustable clamping device and hardwood clamping block for tightening on both sides of the saw blade



Minimum quantity lubrication.

**ADVANTAGES AT A GLANCE**

- ▶ Clamping, sawing, reverse motion, opening – 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

# SKL 450 NA

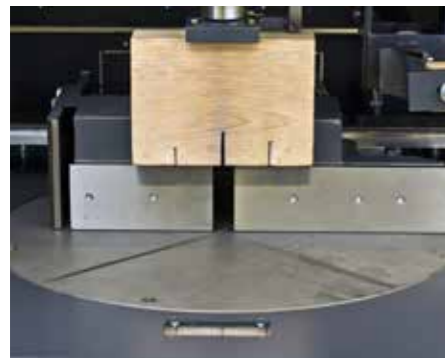
## FULL SPEED AHEAD FOR PRODUCTION



**RELIABLE.  
FLEXIBLE.**



SKL 450 NA



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



High-precision material positioning via infeed gripper with ball screw.



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

Based on the SKL 450 H, the NA model is an efficient, high-performance sawing machine with a robust feed system.

### ADVANTAGES AT A GLANCE

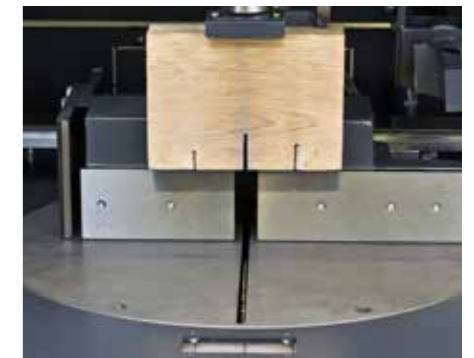
- ▶ Infeed gripper for material lengths up to 9999 mm
- ▶ Special infeed gripper minimises end-piece lengths
- ▶ Electro-mechanical material infeed gripper for short cycle times
- ▶ Optional chip extraction device
- ▶ Efficient minimum quantity lubrication for extended blade life
- ▶ Can be combined with fully automatic flat magazine for pre-storage of material
- ▶ Two cutting speeds for different material dimensions



Hydropneumatic saw blade feed.



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



Vertical hardwood clamping block to protect material surface.



Simple operation and programming via NC control with input panel.

## TL SERIES ACCESSORIES



**L10 length stop**  
Working range 0 - 1000 mm.



**L12 length stop**  
Incl. support. Guide rails with precision scale. Length readings for 90° and 45° cuts. Stop guide for short cuts.



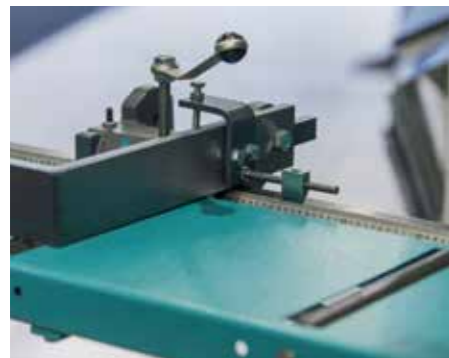
**Machine base (TL 250 and TL 350 only)**  
Machine base with ball-bearing mounted swivel plate to tilt the machine for angled cuts. Outrigger on workpiece stop with support to maintain material feed direction.



**Longitudinal cutting device (TL 250 and TL 350 only)**  
With stop which can be configured to circular guide.



**L 41 NC length measuring device (TL 450 only)**  
Motor-driven adjustment of measurement length via NC control. The stop carriage is automatically clamped on reaching the position. Easy operation via touchscreen.



**L 45 E length measuring device (TL 350 and TL 450 only)**  
For manually adjustment of measurement length. Adjustable vernier for high measurement accuracy. Attachable stop guide for short cut lengths. Stop arm can be pivoted upwards.



**T3 roller conveyor (TL 350 and TL 450 only)**  
T3 modular extendable roller conveyor system (with L41 NC length measuring system).

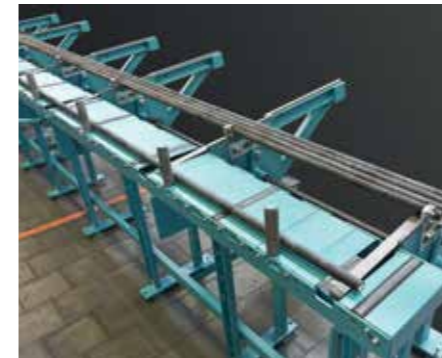
## SKL SERIES ACCESSORIES



**T3 roller conveyor**  
T3 modular extendable roller conveyor system (with L41 NC length measuring system).



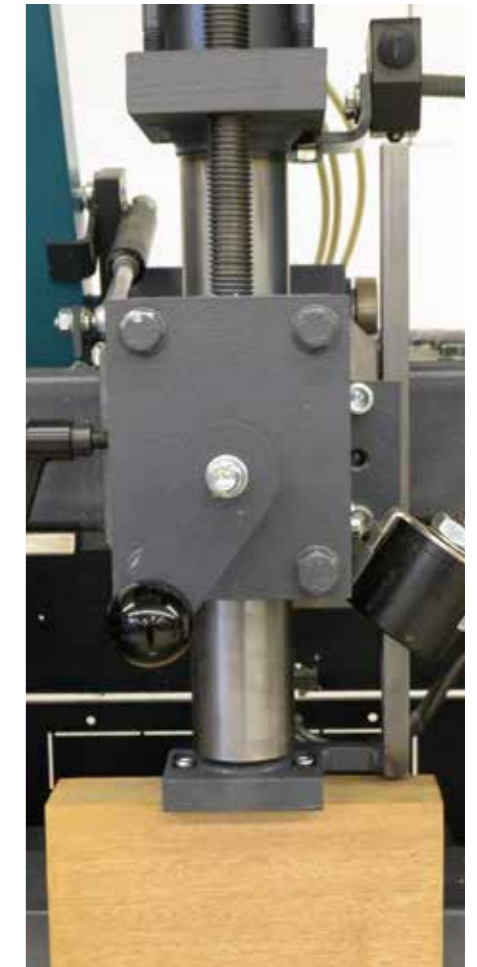
**Pneumatic horizontal clamp**



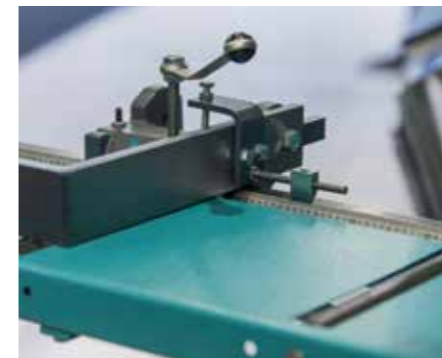
**LM 1 loading magazine (SKL 450 NA only)**  
For pre-storage of round and square material.



**FM 1 flat magazine (SKL 450 NA only)**  
For pre-storage of round and square material and profiles (including special profiles).



**Reinforced workpiece clamping device**  
With hand crank for pre-adjustment (SKL E only; comes as standard with SKL H).



**L 45 E length measuring device**  
For manually adjustment of measurement length. Adjustable vernier for high measurement accuracy. Attachable stop guide for short cut lengths. Stop arm can be pivoted upwards.



**L 41 NC length measuring device**  
Motor-driven adjustment of measurement length via NC control. The stop carriage is automatically clamped on reaching the position. Easy operation via touchscreen.

## TL SERIES AT A GLANCE

| TECHNICAL DATA                     | TL 250        | TL 350        | TL 450        |
|------------------------------------|---------------|---------------|---------------|
| Saw blade Ø                        | 250 mm        | 350 mm        | 450 mm        |
| Drive performance                  | 1.1 kW        | 2.0 kW        | 2.2 kW        |
| Cutting speed                      | 2700 m/min    | 3200 m/min    | 4100 m/min    |
| Dimensions                         |               |               |               |
| – length                           | 450 mm        | 450 mm        | 610 mm        |
| – width                            | 670 mm        | 840 mm        | 1070 mm       |
| – height                           | 680 mm        | 750 mm        | 1440 mm       |
| Weight                             | 56 kg         | 68 kg         | 180 kg        |
| Working height (with machine base) | 964 mm        | 1008 mm       | 1014 mm       |
| Pivoting range for mitre cuts      | -45°/90°/+30° | -45°/90°/+30° | -45°/90°/+30° |
| Working range                      |               |               |               |
| ●○ (round) 90°                     | 80 mm         | 115 mm        | 150 mm        |
| ●○ (round) 45°                     | 80 mm         | 115 mm        | 145 mm        |
| ■□ (square) 90°                    | 70 mm         | 100 mm        | 135 mm        |
| ■□ (square) 45°                    | 65 mm         | 100 mm        | 125 mm        |
| ■□ (flat) 90°                      | 130x40 mm     | 250x40 mm     | 320x40 mm     |
| ■□ (flat) 45°                      | 100x40 mm     | 190x40 mm     | 250x40 mm     |

| FEATURES                    | TL 250 | TL 350 | TL 450 |
|-----------------------------|--------|--------|--------|
| Saw blade lubricating pump  | ●      | ●      | ●      |
| Machine base                | ○      | ○      | ●      |
| Pneumatic clamp             | –      | ○      | ●      |
| Longitudinal cutting device | ○      | ○      | –      |
| Length stops                | ○      | ○      | ○      |

● = Standard   ○ = Optional   – = Not possible

## SKL SERIES AT A GLANCE

| TECHNICAL DATA                | SKL 450 E       | SKL 450 H       | SKL 450 NA      |
|-------------------------------|-----------------|-----------------|-----------------|
| Saw blade Ø                   | 450 mm          | 450 mm          | 450 mm          |
| Drive performance             |                 |                 |                 |
| – standard                    | 3.7/4.7 kW      | 3.7/4.7 kW      | 3.7/4.7 kW      |
| – optional                    | –               | 4.7/6.3 kW      | 4.7/6.3 kW      |
| Cutting speed                 | 1950/3900 m/min | 1950/3900 m/min | 1950/3900 m/min |
| Stroke length infeed gripper  |                 |                 |                 |
| – single stroke               | –               | –               | 1000 mm         |
| – multi stroke                | –               | –               | 9999 mm         |
| Saw blade feed                |                 |                 |                 |
| – infinitely adjustable       | 0-3000 mm/min   | 0-3000 mm/min   | 0-3000 mm/min   |
| – rapid return                | 4500 mm/min     | 4500 mm/min     | 4500 mm/min     |
| Dimensions                    |                 |                 |                 |
| – length                      | 920 mm          | 920 mm          | 2700 mm         |
| – width                       | 1300 mm         | 1300 mm         | 1450 mm         |
| – height                      | 2010 mm         | 2010 mm         | 1900 mm         |
| Weight                        | 680 kg          | 680 kg          | 1480 kg         |
| Working Height                | 1010 mm         | 1010 mm         | 1010 mm         |
| Pivoting range for mitre cuts | 180°            | 180°            | 180°            |
| Arbeitsbereich                |                 |                 |                 |
| ●○ (round) 90°                | 160 mm          | 160 mm          | 160 mm          |
| ■□ (square) 90°               | 145 mm          | 145 mm          | 145 mm          |
| ■□ (square) 45°               | 130 mm          | 130 mm          | 130 mm          |
| ■□ (flat) 90°                 | 320x50 mm       | 320x50 mm       | 320x50 mm       |
| ■□ (flat) 45°                 | 250x40 mm       | 250x40 mm       | 250x40 mm       |

| FEATURES                                | SKL 450 E | SKL 450 H | SKL 450 NA |
|---|-----------|-----------|------------|
| Pneumatic vertical clamping device      | ●         | ●         | ●          |
| Horizontal clamping device left / right | ○/○       | ○/○       | –/○        |
| Pre-adjustable workpiece stop           | ●         | ●         | ●          |
| Electronic stroke limiter               | ●         | ●         | ●          |
| Minimum quantity lubrication            | ●         | ●         | ●          |
| Sound-insulating enclosure              | –         | –         | ○          |
| Machine compartment lighting            | –         | ●         | ●          |
| Counter                                 | –         | ●         | ●          |
| Pneumatic cut stop                      | –         | –         | ○          |
| Chip extraction unit                    | ○         | ○         | ○          |
| Transport / length measuring systems    | ○         | ○         | ○          |
| Automatic infeed magazine               | –         | –         | ○          |

● = Standard   ○ = Optional   – = Not possible

# KALTENBACH TECHNICAL SERVICES

## SERVICE YOU CAN RELY.



KALTENBACH and our KALTENBACH partners are on hand to advise and assist you worldwide, 365 days a year. Whether you need machines or parts, maintenance or servicing – we are here to help.

We endeavour to provide the best possible service because our thoughts, feelings and actions reflect yours. And you can help us make our service even better.

Please get in touch, anytime.

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



### ▶ Spare parts – Original quality

**OUR SPECIALISTS RESPOND, DIAGNOSE AND ACT - WE UNDERSTAND THAT SPEED IS OF THE ESSENCE.**

#### **ONLY THE BEST - ONLY ORIGINAL PARTS**

KALTENBACH and KALTENBACH partners offer you their experience and knowledge. We understand your business and provide all the products you need to ensure that your processes are safe and reliable: The right parts, the right tools, the right lubricants.

And once our Field Service or Helpdesk has found the best solution for you, we ensure prompt delivery. We are well aware that time is money in production – so our original parts service helps you to save both.

Find your local contact at:  
[www.kaltenbach.com](http://www.kaltenbach.com)

### ▶ Field service

**SAVING TIME AND COSTS ARE THE ULTIMATE PRIORITIES IN PRODUCTION. WITH US, YOU CAN DO BOTH.**

#### **WE THINK ABOUT YOU, EVEN WHEN WE ARE NOT WITH YOU.**

Knowledge, experience and a passionate commitment to support our customers in the best possible way is what makes our service great: Dedicated people close to hand who understand your business so that you can make headway.

Our field service engineers can be called out at very short notice if necessary. These highly qualified technicians will diagnose the problem and actively work with you to find the best solution. Plant maintenance service and aftersales complete the package – service you can rely on.

### ▶ Competence centre

**HOW CAN WE HELP YOU? THROUGH OUR COMMITMENT TO PROBLEM SOLVING.**

#### **▶ HELPDESK – ALWAYS AT THE READY**

Our Helpdesk's priority is to help you as quickly as possible. Our skilled customer service team offers professional support throughout the world to help resolve all your machinery problems and technical queries.

Although our experience shows that 90% of all service enquiries can be handled by telephone or using our online support system, we will gladly arrange a visit from a field service engineer whenever necessary.

#### **▶ KALTENBACH ACADEMY**

Nothing feels quite as good as getting better.

We will help you improve your knowledge of the machines and keep it up-to-date to maximise your efficiency. At the KALTENBACH Academy our experienced experts provide customer training and advice tailored to your specific industry and needs.

#### **WE PROVIDE:**

- ▶ a highly efficient logistics network in over 40 countries
- ▶ original parts direct from the manufacturer
- ▶ prices in line with the market
- ▶ professional advice tailored to your needs
- ▶ coordination of delivery to your premises
- ▶ plant maintenance advice

#### **GLOBAL SPECIALISTS IN:**

- ▶ individual, tailored contract terms and maintenance schemes
- ▶ problem-solving
- ▶ service
- ▶ updates
- ▶ machine relocations
- ▶ machine modifications and refits

#### **OUR SERVICE TEAM WILL:**

- ▶ provide technical support in the event of a machine breakdown with the aim of minimising downtime
- ▶ help by providing first-time fixes or organising on-site support
- ▶ keep you informed throughout the problem-solving process

#### **EXPERTS ARE ON HAND FOR:**

- ▶ product training
- ▶ safety training
- ▶ maintenance advice
- ▶ maintenance instructions
- ▶ internal partner audits
- ▶ advice (machine efficiency, logistics, tools and materials)



# KALTENBACH WILL FIND A SOLUTION. OR ALREADY HAS.

Metalworking and the metals trade involve a wide range of challenging tasks. This calls for systems which are powerful, versatile and durable in the long-term. Our plants ensure that any problem can be solved – safely and reliably:

- ▶ BAND AND CIRCULAR SAWING MACHINES
- ▶ SAW-DRILL-LINES
- ▶ PROFILE DRILLING MACHINES
- ▶ PROFIL PROCESSING ROBOTS
- ▶ DRILL-BURN-LINES
- ▶ PUNCHING AND SHEARING SYSTEMS
- ▶ PLATE PROCESSING CENTRES
- ▶ SHOTBLAST SYSTEMS
- ▶ PAINTING SYSTEMS
- ▶ MARKING SYSTEMS
- ▶ MEASURING SYSTEMS
- ▶ TRANSPORT SYSTEMS

More information and a list of our representatives around the world can be found at:

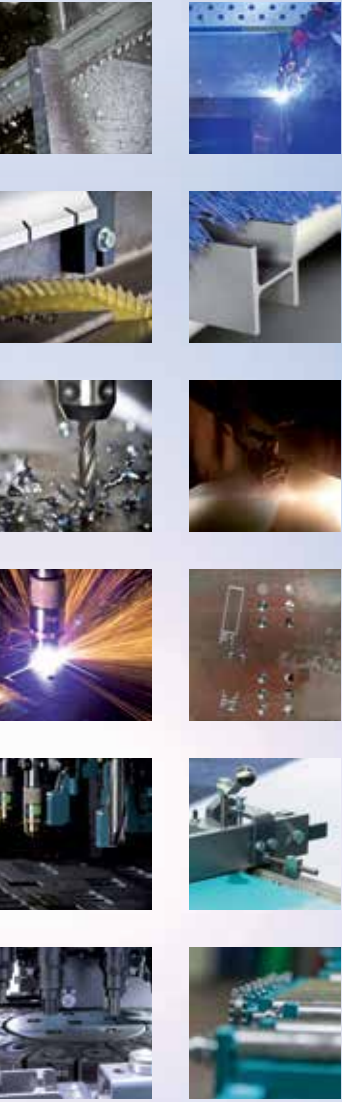
**[WWW.KALTENBACH.COM](http://WWW.KALTENBACH.COM)**

Product videos:

**[WWW.YOUTUBE.COM/KALTENBACHGROUP](http://WWW.YOUTUBE.COM/KALTENBACHGROUP)**

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**KALTENBACH GMBH + CO. KG**

Blasiring 4

D-79539 Lörrach

Tel.: +49 7621/175 - 0

E-Mail: [info@kaltenbach.de](mailto:info@kaltenbach.de)

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

POWERFUL SOLUTIONS –  
PASSIONATE PEOPLE



**KALTENBACH**

**FOR PERFECTION  
EN MASSE.**

**MSK 471 NA**  
FULLY-AUTOMATIC UNIVERSAL CIRCULAR  
SAW FOR STRAIGHT CUTS

 > MADE IN GERMANY



# REQUIREMENTS MAY CHANGE WITH TIME.

BUT REAL QUALITY IS ALWAYS UP-TO-DATE.

## 125 YEARS. A COMPANY AT HER BEST AGE.

Processing materials, sawing or drilling, welding or burning them, one is not working just for the moment. But rather creating for the future. While processing such durable materials, one is relying preferably on a long-term partnership.

We provide high-quality and powerful machines, which provide you with reliability in production – and, reliable, passionate

people, who will support you with long-term assurance.

Lasting values have a long tradition at KALTENBACH. More than 125 years of experience have shown us: how to find the right solution together with our customers.

In this product folder you will find information regarding the range of applications,

from individual components to technical data and special advantages. Every machine from KALTENBACH comes installed with the expertise, skills and best system consultancy of our staff whether in Sales or Technical Services and Support.

For all questions and in all cases you can rely on the fact: we are there. Wherever you need us.



## MSK 471 NA

The high performance automatic mitring circular saw MSK 471 NA is designed for the optional use of HSS and carbide tipped saw blades and features especially short length of remnant workpieces.

For unmaned operation, various magazines versions are available for material preliminary storage.

The sorting of first cut, remnant and good parts can be carried out fully automatically for pre-adjustable positions.

### ADVANTAGES AT A GLANCE

- ▶ Fully automatic saw operation and sorting of good work pieces to pre-adjustable positions
- ▶ Low vibration due to the extreme rigidity of the component clamping.
- ▶ Minimum residual piece length (50 mm)
- ▶ High productivity because of very long lifetime of the saw blades
- ▶ Reduced tool wear due to carbide equipped saw blade guides
- ▶ Material feed gripper (movement via ball screw and brush-free servo motor, single and multi stroke)
- ▶ Saw blade feed via screw ball
- ▶ Combi drive for HSS- and carbide-equipped tools
- ▶ Very low vibrations because of the motor base as complete unit
- ▶ High automation degree due to various magazine variants and fully automatic processing and sorting of good parts

### CONTENT

|                          |    |
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| ▶ Accessories            | 8  |
| ▶ Material Removal       | 9  |
| ▶ Software PROFICUT      | 10 |
| ▶ Material Feed          | 12 |
| ▶ MSK 471 NA at a glance | 13 |
| ▶ Technical Services     | 14 |



1



2



3

- 1 Short residual work piece lengths
- 2 Fully automatic feed magazine
- 3 Saw feed via screw ball

# MSK 471 NA

## HIGHLY FLEXIBLE STRAIGHT CUT MITRING CIRCULAR SAW



**POWERFUL.  
COMPACT.  
RELIABLE.**

Components manufactured with a Kaltenbach machine.



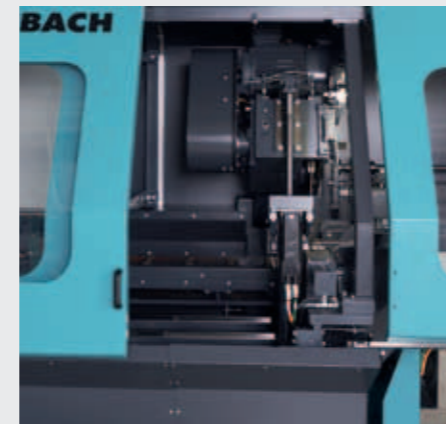
Compact, ergonomic structure:  
Short installation and commissioning  
times and easy to maintain due to the  
good accessibility.



Ergonomic, pivoting control panel.



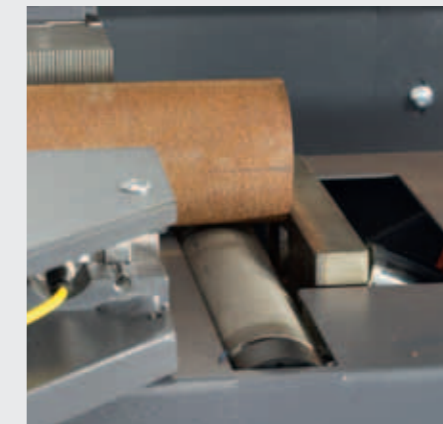
Performance drive motor with heavy saw gear.



Good accessibility due to big front doors.



Easy saw blade change.



Mechanical cut stop for the identification of  
materials.



Automatic height measuring of materials and  
adjustment to the programmed values.

### EINSATZMÖGLICHKEITEN

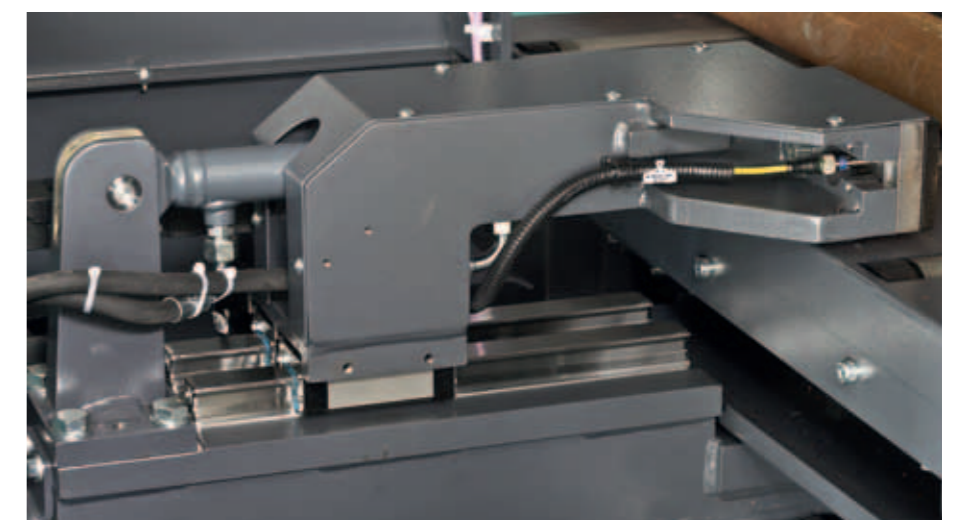
- ▶ Mechanical working
- ▶ Steel trade
- ▶ Machine construction
- ▶ Transport and storage systems
- ▶ Vehicle construction
- ▶ Automobile suppliers
- ▶ We are looking forward talking to you regarding your specific applications and requirements.



Highly precise cuts by positioning the automatic dispenser over the screw ball and servo motor.



Saw blade feed with stable screw ball.

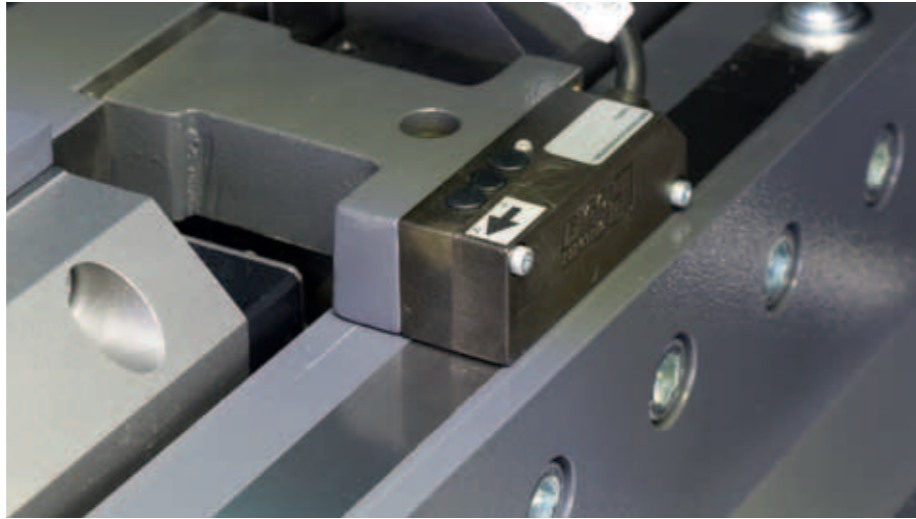


Longitudinal lift cylinder and therefore omission of setup time.

# ACCESSORIES



Swarf removal brush, reduced wearing level due to separate drive.

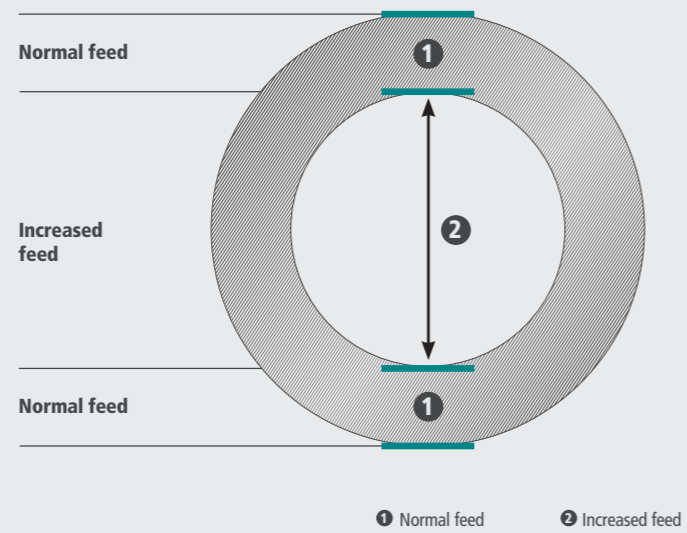


Automatic measuring of material widths.



Coolant atomizer system.

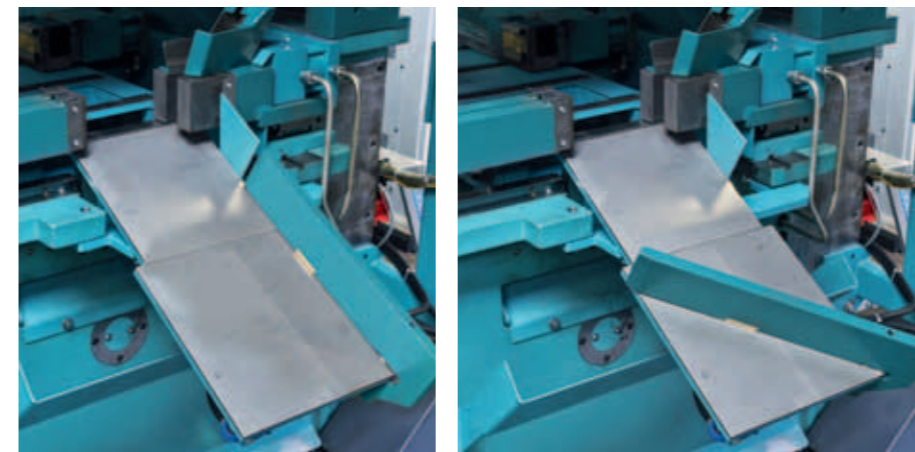
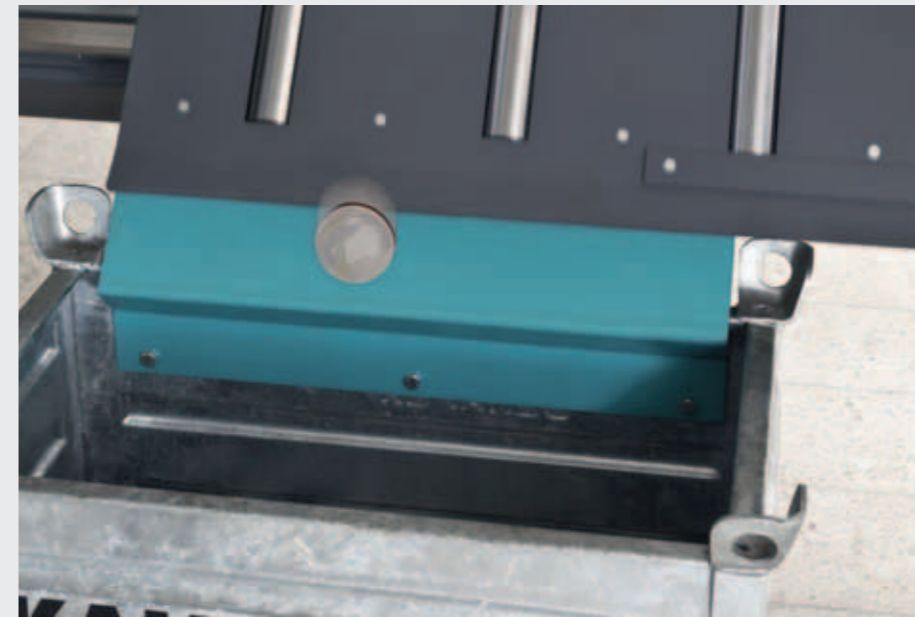
Dynamic feed regulation for the reduction of cutting times



# MATERIAL REMOVAL



Extendible tipping roll rail, sorting positions can be selected freely.

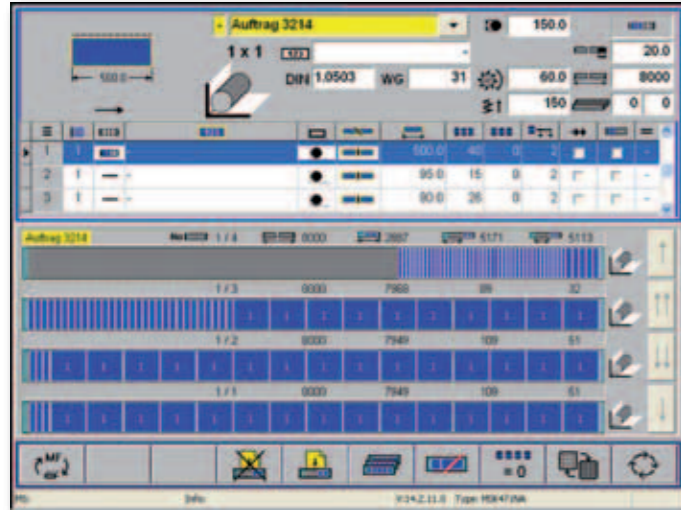


Sorting track for cuts of up to 250 mm and separation of cuts and residual pieces.

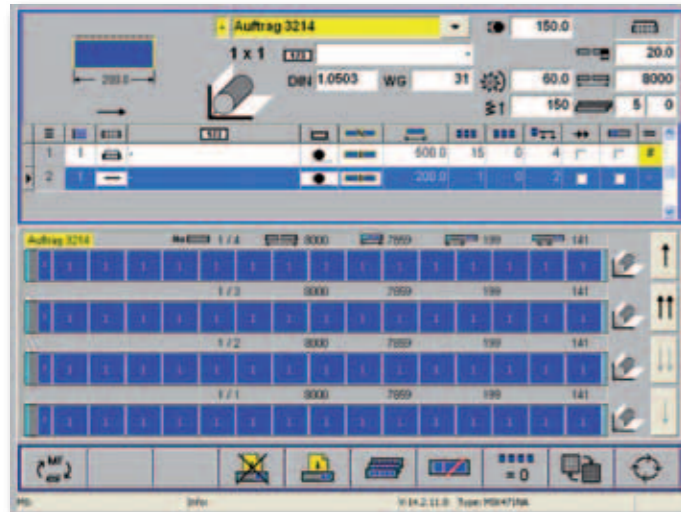
# PROFICUT – SOFTWARE FOR PROFIS

## Bar optimization

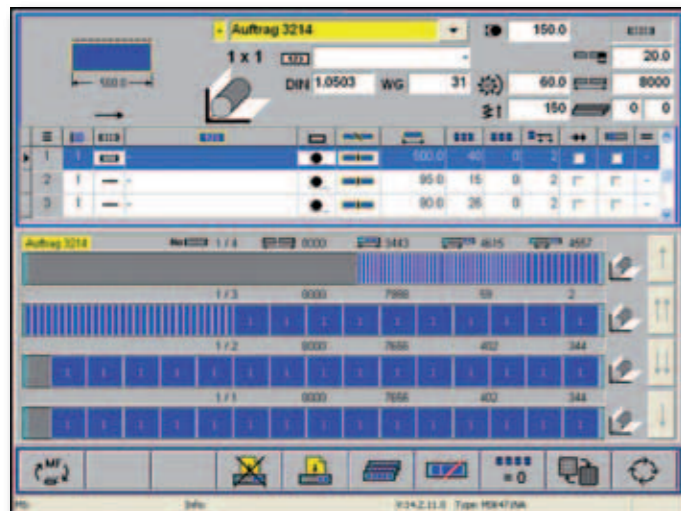
Selection of processing type



▶ work piece oriented

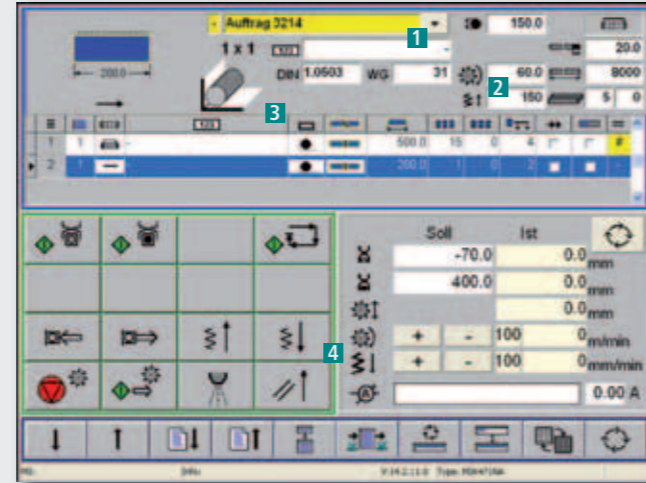


▶ bar oriented

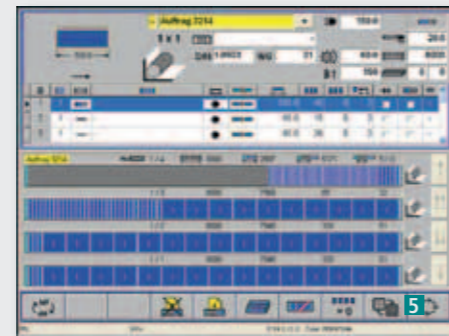


▶ filling oriented

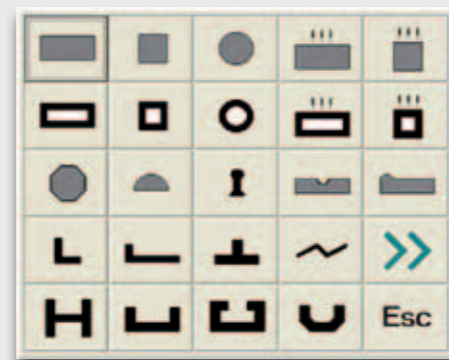
▶ The whole control and programming of the MSK 471 NA is carried out via touchscreen over the graphic operating interface PROFICUT under Windows. A connection to the network is possible.



- 1 Storage possibility for as many saw cutting orders as desired
- 2 Automatic calculation of cutting speed and feed for the material group or DIN no. (steel key).
- 3 Graphics of the cut material
- 4 Operation of the machine



5 Graphical illustration of the bar allocation and the needed bars



Selection of pre-programmed material shapes

## CUSTOMER LEVEL

- ▶ Customer software that can export CAD files in DSTV format or CSV format (Excel)
- ▶ PROFICUT additional license (optional) for the registration of the sawing orders in the office PC

Data transfer via network of data medium.

Machine PC with graphic touch screen operating panel under Windows. Software PROFICUT for the reading in of CAD data, resp. of the data from the PROFICUT office license and for the direct data input into the machine.

## MACHINE CONTROL LEVEL

### Input functions:

- ▶ As many sawing orders as needed
- ▶ Multi-Tasking operation
- ▶ Input of parts dimensions on the graphically represented part

### Visualization:

- ▶ Machine operating keys
- ▶ Graphical representation of the cross section
- ▶ Graphical representation of parts shapes
- ▶ Preliminary calculation and graphical representation of the table assignment
- ▶ Process visualization
- ▶ Automatic calculation of the optional cutting and feed speed

### Material database:

- ▶ Storage of material data under a freely selectable material identification number

### Parts database:

- ▶ Storage of saw parts under a freely selectable parts identification number

### Remote diagnosis:

- ▶ Via telephone line or internet (Team Viewer)

### Orders management:

- ▶ Programming /management of sawing orders under an order number
- ▶ Input / processing of various materials under one order
- ▶ Input / processing of various material lengths

## MACHINE LEVEL

▶ Execution of the saw cut



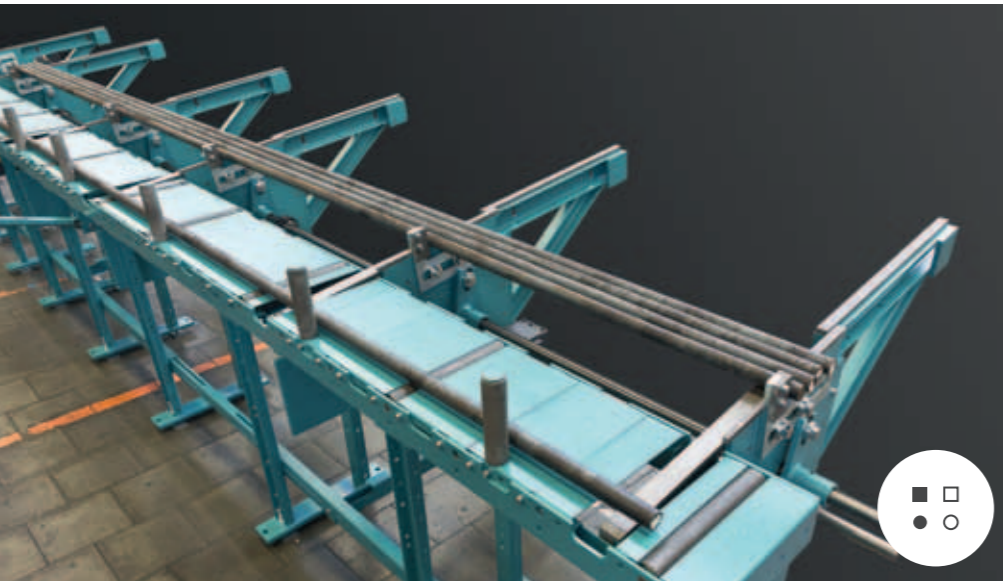
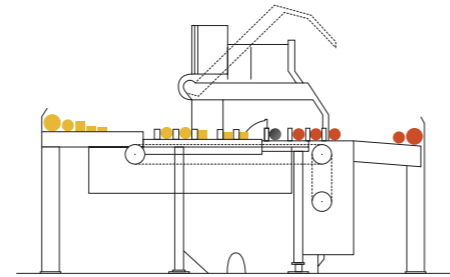
# MATERIAL FEED



- Material to be cut
- Bar in processing
- Remnant pieces

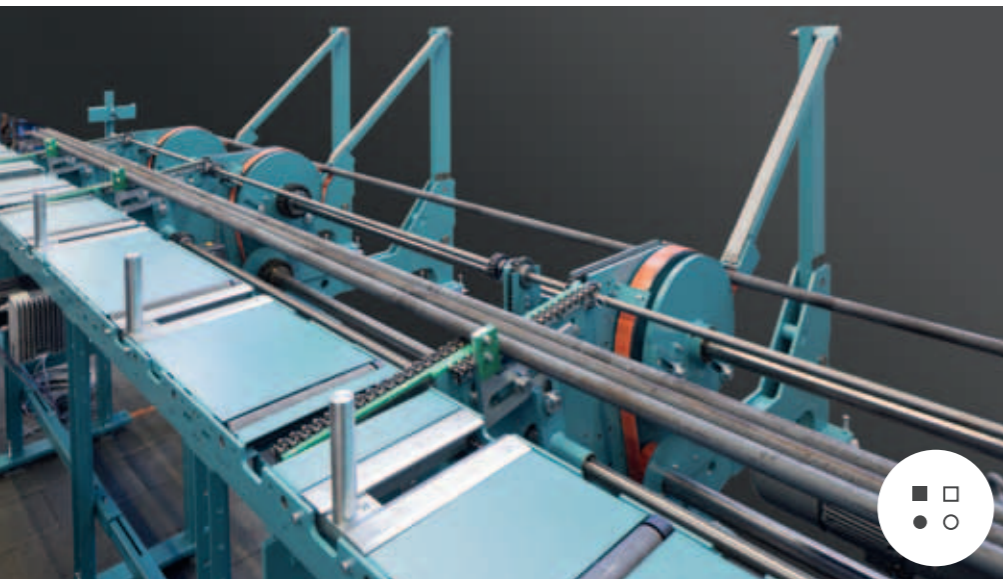
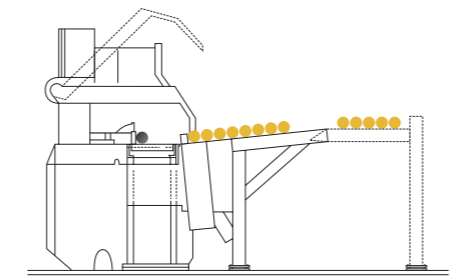
## FLAT MAGAZINE FM 1

For the pre-storage of round and square material as well as profiles (also special profiles).



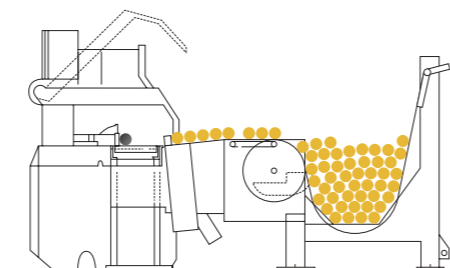
## DIAGONAL MAGAZINE LM 1

For the pre-storage of round and square material.



## BUNDLE MAGAZINE VM

For the pre-storage of round and square material.



# MSK 471 NA AT A GLANCE

## HARD FACTS

|                               |  |
|-------------------------------|--|
| Saw blade Ø                   | 460/470 mm                               |
| Saw blade types               | HM/HSS                                   |
| Saw blade support DIN 8576    | 50/4x14/80 mm                            |
| Working range                 |  |
| ●○ Round material             | 10 – 152 mm                              |
| ■□ Square material            | 10 – 140 mm                              |
| Drive performance             |  |
| – Sawing motor                | 19 kW (optional: 32 kW)                  |
| – Hydraulic system            | 5,5 kW                                   |
| – Coolant pump                | 0,1 kW                                   |
| Cutting speed                 | 8 – 150 m/min (optional: 50 – 300 m/min) |
| Saw blade feed                |  |
| – steplessly adjustable       | 0 – 2.000 mm/min                         |
| – Fast return stroke          | 6.000 mm/min                             |
| Dimensions                    |  |
| – length                      | 4.080 mm                                 |
| – width                       | 2.750 mm                                 |
| – height                      | 2.385 mm                                 |
| Material supply               |  |
| – Pre-adjustable length       | 8 – 9.999 mm                             |
| – Lift length                 | 1.200 mm                                 |
| – Supply speed                | 20 – 60 m/min                            |
| – Return speed of the gripper | 20 – 60 m/min                            |
| Residual work piece length    | 50 mm                                    |
| Electrical connection         | 400/50 V/Hz                              |
| Weight                        | 4.750 kg                                 |

## FEATURES

|  |   |
|--|---|
| Automatic tension pressure reduction                 | ○ |
| Dynamic feed regulation                              | ○ |
| Material height measuring                            | ● |
| Material width measuring                             | ○ |
| Automatic residual length measuring of the material  | ● |
| Sawing table in hardened execution                   | ● |
| Flush lubrication                                    | ● |
| Coolant atomizer system                              | ○ |
| Graphical operating surface PROFICUT                 | ● |
| Cut stop   | ● |
| Swarf conveyor                                       | ● |
| Swarf removal brush with separate drive Feed machine | ○ |
| Material chute for short parts                       | ● |
| Cut gripper with movable tipping table               | ○ |
| Sort station for section length of up to 250 mm      | ○ |
| Absorption of sawing steams                          | ○ |
| Signal column for error messages                     | ○ |

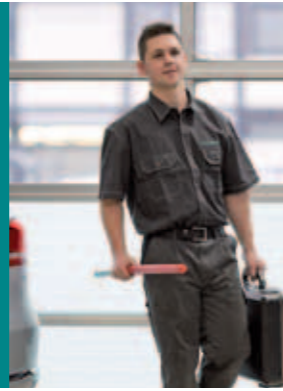
● = standard    ○ = optional





# KALTENBACH TECHNICAL SERVICES

## SERVICE YOU CAN RELY ON.



KALTENBACH and KALTENBACH partners offer help and advice, 365 days a year and all around the globe. Whether you want to buy machines or parts, whether you need tools, equipment or maintenance – we'll be there for you.

We are aiming at offering the best possible service by thinking, feeling and acting like you. And you can help us making our service even better.

Please talk to us, whatever you need.

▶ [feedback@kaltenbach.de](mailto:feedback@kaltenbach.de)



### ▶ Spare Parts – Original Quality

OUR SPECIALISTS RESPOND, IDENTIFY AND ACT – AS SPEED IS OF THE ESSENCE.

#### ONLY THE BEST – ONLY ORIGINALS.

KALTENBACH and KALTENBACH partners offer you experience and knowledge. They understand your business and offer you all the products you need for safe operation: the right spare parts, the right tools, the right coolants.

After our field service or help desk will determine the best solution for you, our spare parts specialists will take care of rapid delivery. We understand that in production, time is money – that's why our original parts service will help you save both.

Want to help us get even better?

Talk to us here:

[feedback@kaltenbach.de](mailto:feedback@kaltenbach.de)

### ▶ Field Service

SAVING TIME AND REDUCING COSTS ARE THE HIGHEST PRIORITIES IN PRODUCTION. WITH US, YOU'LL ACHIEVE BOTH OF THEM.

#### WE THINK ABOUT YOU, EVEN IF WE'RE NOT WITH YOU.

Knowledge, experience and passion to support our customers makes our service powerful. Dedicated people, close to you with empathy ability in your work so you move forward.

If necessary, our field service engineers will be at your site in short time. Highly qualified, they identify and act to find the best possible solution together with you. Service, maintenance and aftersales advice complete the package for you – service you can rely on.

### ▶ Competence Centre

HOW CAN WE HELP YOU? WITH OUR PASSION FOR FINDING SOLUTIONS.

#### ▶ HELP DESK – WE ARE ALWAYS STANDING BY.

Helping you as quickly as possible is the number one priority of our help desk. Providing professional support worldwide, our qualified customer service team is there to support and assist you with any machine issues and technical queries.

While our experience shows that 90 % of all service enquiries can be resolved over the phone or via on-line support, we are happy to arrange an engineers visit to your site, whenever the need arises.

#### ▶ KALTENBACH ACADEMY

Nothing feels as good as getting better.

We support you in improving and updating your knowledge of the machines to maximise your performance. In the KALTENBACH Academy, our seasoned professionals offer you Customer Training and Consultancy, specifically configured and prepared to suit your industry and application.

#### WE PROVIDE:

- ▶ a highly efficient logistics network in over 40 countries
- ▶ original spare parts directly from the manufacturer
- ▶ market oriented prices
- ▶ professional advice geared to your specific needs
- ▶ coordination of rapid delivery to your location
- ▶ consultation regarding preventive maintenance

#### 80 PROFESSIONALS WORLDWIDE TAKE CARE OF:

- ▶ individual, tailored contract terms and maintenance schemes
- ▶ troubleshooting
- ▶ service
- ▶ updates
- ▶ machine relocations
- ▶ machine changes / upgrades

#### 15 SERVICE TEAM MEMBERS WILL:

- ▶ provide you with technical support in case of machine disruptions with the goal of minimising machine downtime
- ▶ provide you with first-time fix or initiate on site assistance
- ▶ be responsible for keeping you updated about the problem solving processes

#### 4 EXPERTS PROVIDE YOU WITH:

- ▶ product training/instructions
- ▶ safety training
- ▶ preventive maintenance training
- ▶ maintenance instructions
- ▶ internal partner audits
- ▶ consultancy (machine operating efficiency, logistics, tools and consumables)

# KALTENBACH IS FINDING THE RIGHT SOLUTION. MAYBE IT IS ALREADY THERE.

Big and diverse challenges are waiting in the metal and processing industries. To meet them, one needs systems which are powerful, highly versatile and perform efficiently in the long term. Our machines are guaranteeing the right solution for any requirement – safe effective and reliable:

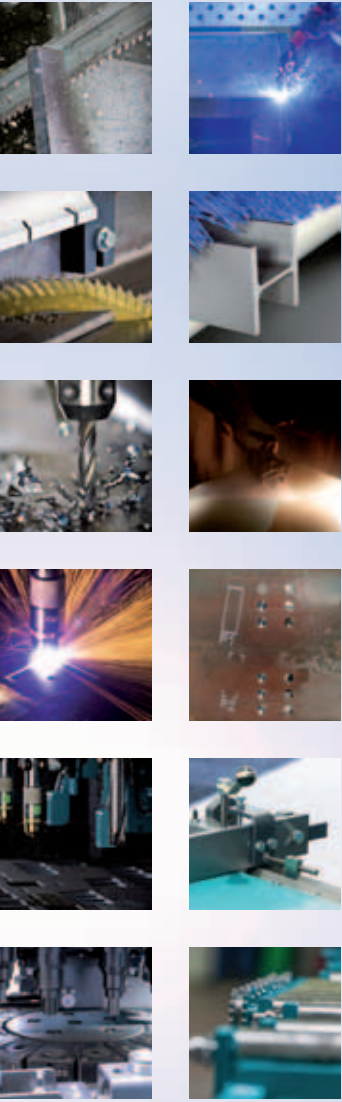
- ▶ BAND AND CIRCULAR SAWING MACHINES
- ▶ DRILL-SAW-LINES
- ▶ PROFILE DRILLING MACHINES
- ▶ PROFILE PROCESSING ROBOTS
- ▶ DRILL-BURN-LINES
- ▶ PUNCHING AND SHEARING SYSTEMS
- ▶ WELDING ROBOTS
- ▶ SHOTBLAST SYSTEMS
- ▶ PAINTING SYSTEMS
- ▶ MARKING SYSTEMS
- ▶ MEASURING SYSTEMS
- ▶ TRANSPORT SYSTEMS

For further information and our foreign affiliates please visit:

**[WWW.KALTENBACH.COM](http://WWW.KALTENBACH.COM)**

Product videos:

**[WWW.YOUTUBE.COM/KALTENBACHGROUP](http://WWW.YOUTUBE.COM/KALTENBACHGROUP)**



**KALTENBACH GMBH + CO. KG**

Blasiring 4

D-79539 Lörrach

phone: +49 7621/175 - 0

e-mail: [info@kaltenbach.de](mailto:info@kaltenbach.de)

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

# CIRCULAR SAWING

## KALTENBACH HIGH-PERFORMANCE THIN-SECTION CIRCULAR SAW



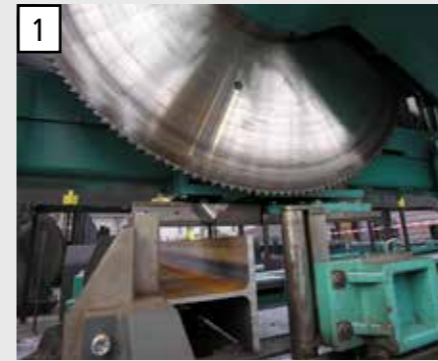
### HDM 1432

- ▶ Vertical saw on robust pivot bearing
- ▶ Powerful drive for high-performance cutting
- ▶ Single cuts in addition to layer and bundle cuts possible
- ▶ NC-controlled cutting-angle setting
- ▶ A drill can be incorporated to create a saw-drill combination
- ▶ Feed via ball screw for perfect cutting results and long blade life

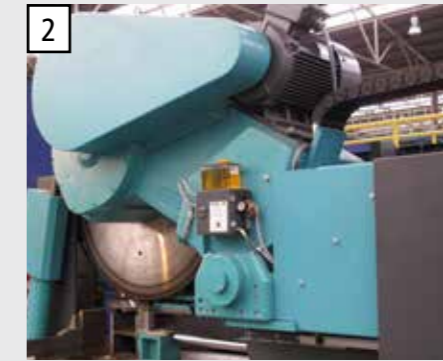
# HDM 1432

HIGH-PERFORMANCE FOR HEAVY-DUTY STEEL FABRICATION AND STEEL SERVICE CENTRES

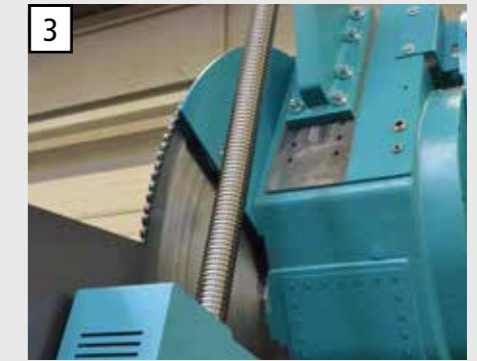
H T L U - O □



1 Robust, hydraulic clamping system reduces vibrations and so increases saw blade life and cutting quality.



2 Powerful drive power reduces cutting times, even with large beams, layers or bundles.



3 Temperature-independent feed via ball screw for perfect cutting results and long blade life.



4 Automatic cross-section measurement during clamping for high process reliability.



5 Chip remover cleans the saw blade for perfect cutting results and shorter cutting times.



6 NC-controlled cutting angle setting for precise positioning.

## TECHNICAL DATA

### HDM 1432

|                                     |        |                    |
|-------------------------------------|--------|--------------------|
| Working range max. [mm]             | 90 °   | 1200 x 450         |
|                                     | + 70 ° | 1008 x 302         |
|                                     | - 70 ° | 1008 x 302         |
|                                     | + 60 ° | 1008 x 302         |
|                                     | - 60 ° | 1008 x 302         |
|                                     | + 45 ° | 716 x 304          |
|                                     | - 45 ° | 716 x 304          |
|                                     | + 35 ° | 524 x 304          |
| Working range min. [mm]             |        | 50 x 50            |
| Drive power [kW]                    |        | 22                 |
| Cutting speed [m/min]               |        | 8 - 30             |
| Saw blade feed [mm/min]             |        | 0 - 400            |
| Rapid feed and return [mm/min]      |        | 6000               |
| Saw blade diameter x width [mm]     |        | 1430 x 9.5         |
| Machine weight [kg]                 |        | 9500               |
| Machine dimensions (L x W x H) [mm] |        | 4500 x 1600 x 3200 |



Record-breaking speed for large steel profiles. Saws individual parts, layers and bundles.



HDM 1432 at F. Hackländer GmbH.