



 > MADE IN GERMANY

DEVELOPED FOR STRONG PERFORMANCE.

- ▶ Band sawing machines
- ▶ High-performance thin-section circular saw
- ▶ Drilling machines
- ▶ Coping robot
- ▶ Plate processing centres
- ▶ Measuring systems
- ▶ Transport systems

POWERFUL SOLUTIONS –
PASSIONATE PEOPLE



KALTENBACH

REQUIREMENTS MAY CHANGE OVER TIME.

BUT GENUINE QUALITY IS TIMELESS.



The work of all those involved in metal fabrication or processing, sawing or drilling, milling or thermal cutting is not short-lived. They are creating something for the future. And when working with such durable materials, it's 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 the range of applications, including 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.

**OVER 130 YEARS OLD –
A COMPANY IN ITS PRIME.**



Sawing

In metal processing, and especially in steel processing, enormous importance is attached to the sawing process. Different technologies have become established in response to the requirements of cutting diverse materials of different size, shape and quality. So users today must choose between using circular saws or band saws. But regardless of the chosen technology, from the user's point of view the crucial factors are speed, quality and precision. KALTENBACH can help you to select the right saw band – whether bimetal or carbide. The market shows that ever greater demands are being placed on sawing processes; in addition to simple straight or mitre cuts, the demand for multi-cuts, i.e. multiple overlapping saw cuts at different angles, is increasing.

KALTENBACH offers a wide range of sawing machines and will gladly provide advice and assistance to help you meet today's market requirements. Please get in touch and together we will find a solution to make your company even more profitable.



Drilling

It's difficult to think of any metal structure that doesn't have to be drilled; indeed, drilling is now considered a basic requirement for any steel fabricator. Parallel drilling on multiple axes is not the only way to maximise efficiency; different tooling options together with an ultra-fast, simple tool-change system are also very important. Nowadays, processes such as drilling, centre-marking, countersinking, thread-cutting, contour marking and milling can be performed simultaneously on several drilling axes. In this field too, tools are continuously being improved and new techniques established. Whilst we are systematically improving drilling performance through the use of carbide and solid carbide tools, our powerful drives, high torques and fast rotational speeds provide the necessary assurance that new processes can be integrated with ease.

KALTENBACH has a range of different drilling machines in its product portfolio. We are happy to advise you on finding the best model to suit your requirements.



Thermal Cutting

It is hard to imagine steel fabrication without thermal cutting technologies such as plasma or oxy-fuel. Through the use of modern software systems and multi-axis machine configurations, even complex shapes can now be produced and machined with relative ease. With regard to the design of the machine, the steel market makes a clear distinction between profile and plate machining. Whereas profile cutting machines typically focus on thermal cutting technology, plate cutting machines increasingly use other technologies as well. The surface quality and depth of cut or material thickness largely determine which technology is used, regardless of the shape of the material. Different depths of cut and cutting speeds can be achieved, depending on the technology. So, choosing the right machine configuration and cutting technology to suit the material being machined is the key to success, to guaranteeing speed, efficiency and profitability.

KALTENBACH offers thermal cutting machines for plates and profiles. Please get in touch if you would like further advice – we are here to help!

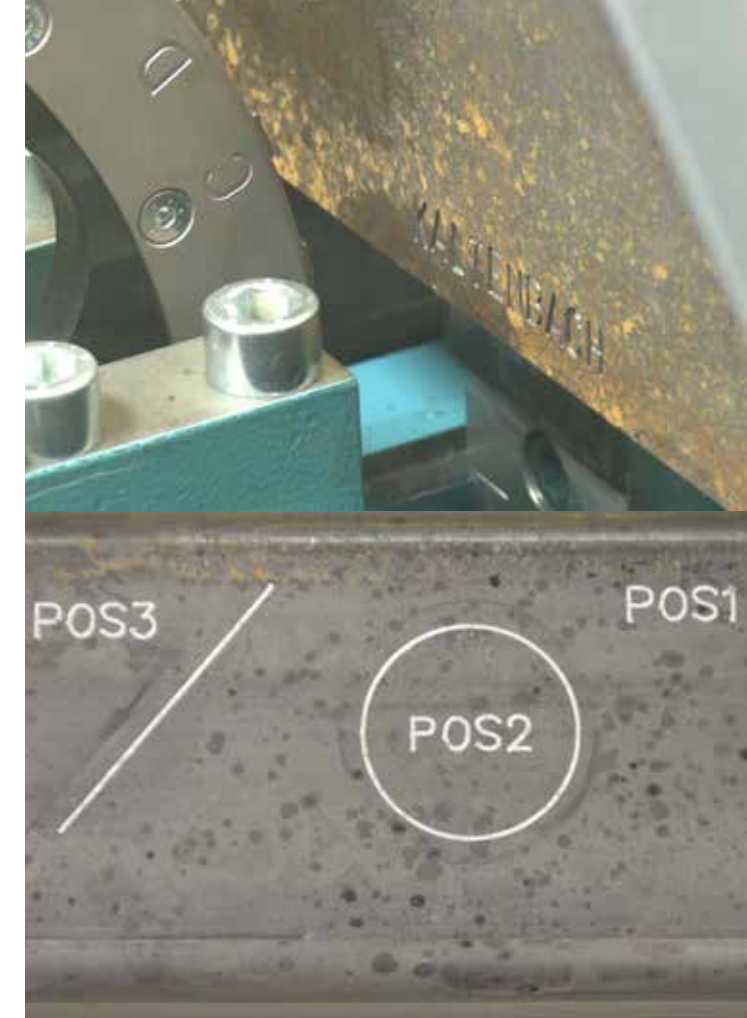
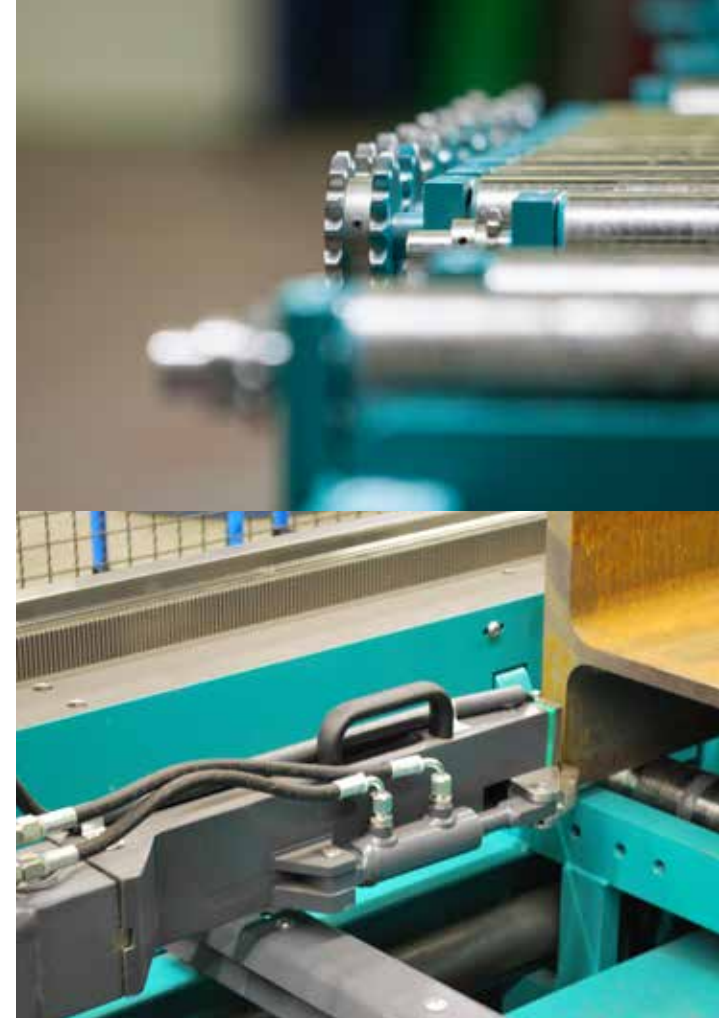


Milling

In the steel fabrication industry, the importance of milling work is growing all the time, meaning that constant technology developments are required. The milling of complex internal and external contours with different milling tools and strategies is one of the main challenges companies are currently facing. The forces generated during the milling process mean that stable and low-vibration machine designs are particularly important. Due to the great variety of different milling tools and tool materials, it is now possible to perform various operations such as milling notches, chamfers, slots and pockets efficiently and accurately.

Ask for our references and convince yourself of the most robust machines on the market. The KALTENBACH machinery.





Shotblasting

Shotblasting is used to remove rust, mill scale, dirt, grease and similar undesirable side effects of working with steel. Shotblasting is the process of directing a stream of abrasive material (small metal balls or steel wire shot) at the surface of the material at a speed of approximately 80 m/s. Plates and profiles can be cleaned prior to machining, also welded structures. At what point this technology is integrated into the steel processing sequence is ultimately a question of philosophy. The turbines are cleverly designed to ensure complete coverage of different materials by the shot. The shotblasting systems are designed to achieve a high material throughput, which boosts efficiency and cost-effectiveness.

KALTENBACH will gladly advise you and supply you with a shotblasting system that meets your requirements. Please get in touch at any time.

Painting

Painting is typically one of the final stages of steel processing. Painted finishes of various kinds protect steel structures from external influences and so ensure a long service life. Surfaces must be clean before they can be painted. Shotblasting systems are typically used for this purpose. Shotblasting provides the keyed surface required to obtain a smooth, well-dried paint finish. Optimising paint consumption – which accounts for a large share of the operating costs – is an important aspect of paint systems. Intelligent strategies based on the material geometry are the key to success.

InTEC is KALTENBACH's competent partner for paint systems. Together, we offer a complete package.

Transporting and Measuring

Efficient material handling and precise measurement not only ensure the quality of your products, they also increase your productivity. Measurement systems must be flexibly designed to handle materials of different shape, size and weight reliably. A robust, low-maintenance design and accurate positioning are also hugely important. Automated infeed and outfeed systems and interlinked material flow solutions are becoming increasingly important. The efficient handling of unprocessed and finished products and the tailored integration of systems into existing production environments are the principal challenges in this field.

KALTENBACH has a wide range of materials handling and measurement systems to suit virtually any customer requirement. And thanks to our modular design, individual solutions can easily be combined to ensure successful plant integration within your production environment.

Marking

Parts are mostly marked in order to identify the material. The primary aims here are being able to find the parts quickly and guaranteeing that they are allocated properly. Various methods are employed: stamping, milling and dot marking. Important here is that all markings can even be applied after painting or galvanising. In most cases the markings can be transferred directly from the CAD system. There are also methods for identifying the material during the machining process. Those methods include the use of barcode labels, which can be attached to provide additional information. Contour marking is a way of providing information about the connection of further parts. Here again, a suitable software link enables the information to be transferred directly from the CAD system.

KALTENBACH is experienced in the use of various methods on diverse materials and can advise you accordingly and thus help you to increase your productivity.





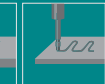






PRODUCT PORTFOLIO

The scope of the KALTENBACH product portfolio is very broad and very deep. In addition to band sawing machines, plate processing centres, drilling machines, coping robots, KALTENBACH also manufactures circular sawing machines and shotblasting and painting systems. This product portfolio enables KALTENBACH to act as a system provider and offer complete solutions tailored to our customers' needs. With high-performance machines, over 130 years of accumulated know-how and a high quality advisory service, at KALTENBACH we know how to boost our customers' efficiency and productivity.

This KALTENBACH product catalogue contains solutions for all aspects of steel profile processing.

For information about other products, please visit:
www.kaltenbach.com

LEGEND



Sawing with saw band

Sawing with saw blade





Drilling

Milling

Thread-cutting

Counter-sinking

Contour-marking



Oxy-fuel cutting

Plasma cutting

Signature stamping

Centre-marking

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BAND SAWING

KALTENBACH BAND SAWS

ADVANTAGES AT A GLANCE:

- ▶ Robust, low-vibration twin-column construction for perfect cutting results
- ▶ NC-controlled drive for precise setting of cutting angle
- ▶ Powerful clamping system reliably holds material and reduces vibrations to prolong band life and best cutting results
- ▶ Intelligent material measurement integrated into clamping system for greater process reliability
- ▶ Swarf brush to improve cutting performance and reduce impurities in the machine
- ▶ Cut monitoring system incl. cutting pressure and slippage control for optimum cutting quality
- ▶ Laser-assisted cutting edge visualisation for manual cuts



KBS 400 DG | 620 DG | 750 DG | 1010 DG

The KBS 400-1010 series is ideally suited to light- and medium-duty steel fabrication and steel service centres.

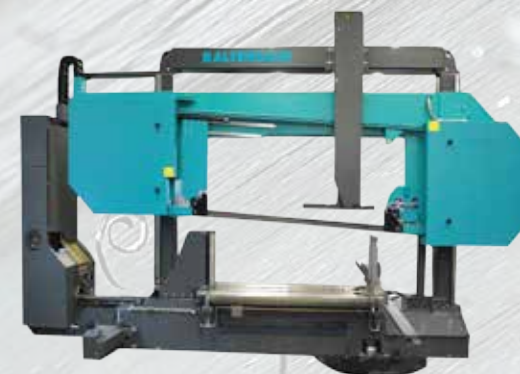
- ▶ Simultaneous cutting of multiple profiles in layers or bundles (depending on machine type)
- ▶ Low investment volume for best cutting results for small to medium profiles



KBS 761 DG | 1051 DG | 1351 DG

The KBS 761-1351 series is ideally suited to all aspects of sectional steel fabrication and steel service centres. The machines are specifically designed with a high level of automation, high cutting performance and low maintenance requirements.

- ▶ High process automation can be combined with an autosorter
- ▶ Powerful drives for high-performance cutting with carbide saw bands
- ▶ Auto Feed Control automatically controls the saw band angle to suit the profile cross-section, significantly reducing cutting times
- ▶ Saw band feed via ballscrew and servomotor for high-precision control
- ▶ Fast change of the saw band for low idle times



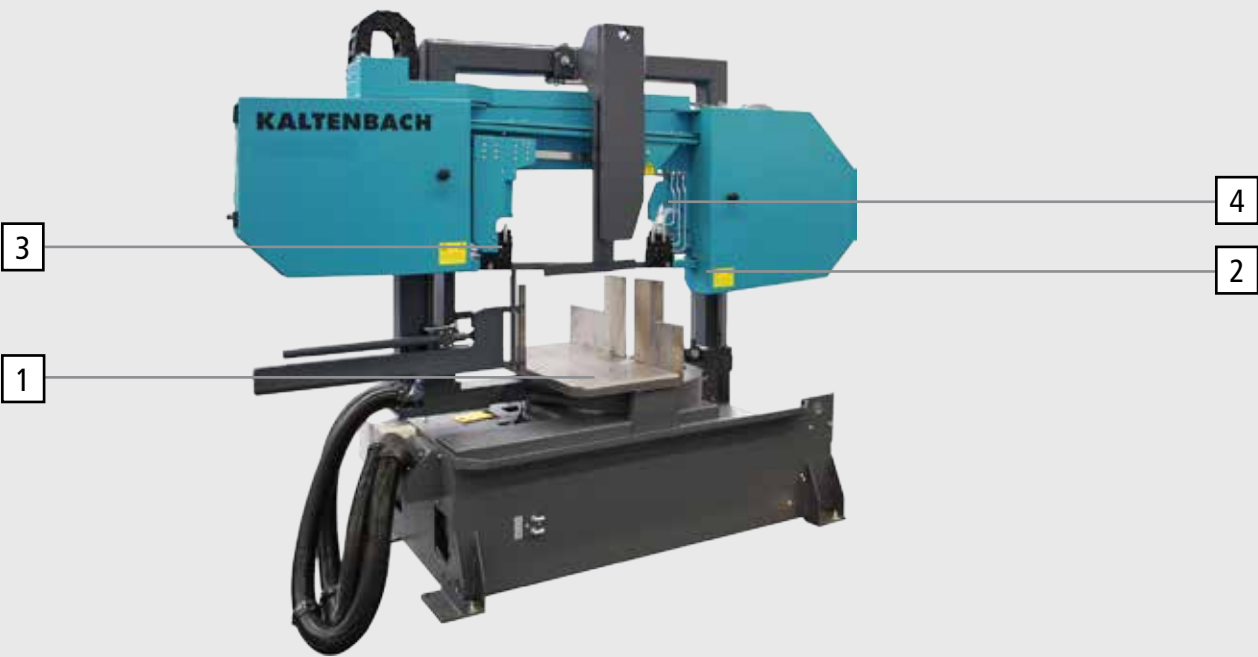
KBS 1301 DG | 2101 DG

The KBS 1301-2101 series is ideally suited to medium- and heavy-duty steel fabrication and steel service centres. The machines in this range are specifically designed for machining large-volume profiles which can also be mitre-cut.

- ▶ Drive concepts are perfectly designed for machining profiles with large material cross-sections
- ▶ Pivotal saw mounted on guide rails for high-precision mitre cuts
- ▶ Motor-driven, movable roller conveyor automatically removes even short mitre-cut parts

KBS 400 DG | 620 DG | 750 DG | 1010 DG
THE VERSATILE BAND SAW WITH MITRE UNIT FOR STEEL

H T L U - O □



NC-controlled cutting angle setting. Powerful clamping system to ensure high cutting quality and long saw band life.



Independently driven swarf brush cleans the saw band after engagement to reduce cutting times and contamination.



Carbide-tipped saw band guides with automatic feed control ensure maximum cutting precision.



Laser pointer for manual cutting on scribe mark to ensure simple, reliable material alignment.



Automated sawing of layers and bundles by infeed gripper (NA) for greater production efficiency.

TECHNICAL DATA	KBS 400 DG	KBS 620 DG	KBS 750 DG	KBS 1010 DG
Working range max. [mm]				
90 °	400 x 350	620 x 350	750 x 500	1010 x 500
+ 70 °	400 x 350	615 x 350	730 x 500	970 x 500
- 70 °	390 x 350	595 x 350	710 x 500	950 x 500
+ 60 °	380 x 350	570 x 350	670 x 500	895 x 500
- 60 °	355 x 350	540 x 350	650 x 500	870 x 500
+ 45 °	315 x 350	470 x 350	550 x 500	735 x 500
- 45 °	275 x 350	430 x 350	520 x 500	695 x 500
+ 40 °	285 x 350	425 x 350	500 x 500	665 x 500
- 40 °	-	-	-	-
+ 30 °	255 x 350	330 x 350	390 x 500	520 x 500
Working range min. [mm]	10 x 10	10 x 10	10 x 10	45 x 10
Drive power [kW]	4.0	4.0	5.5	7.5
Cutting speed [m/min]	15 - 90	15 - 90	15 - 100	15 - 120
Saw band feed [mm/min]	0 - 300	0 - 300	0 - 300	0 - 400
Rapid feed and return [mm/min]	2500	2500	2500	2500
Saw band material	Bimetal	Bimetal	Bimetal	Bimetal
Saw band dimensions (L x W x H) [mm]	5370 x 1.3 x 41	6175 x 1.3 x 41	6990 x 1.3 x 41	7470 x 1.3 x 41
Machine weight [kg]	2300	2600	3200	3900
Machine dimensions (L x W x H) [mm]	2710 x 1280 x 2220/2280	3000 x 1250 x 2200/2280	3300 x 1250 x 2550/2630	3700 x 1280 x 2550



"We managed to increase our productivity in a very short space of time with the new sawing and drilling system. By reducing manufacturing times by more than 60% to one third of the previous time, we can now process more orders. As a result, not only have we noticeably reduced costs, we have also optimised our manpower capacity."

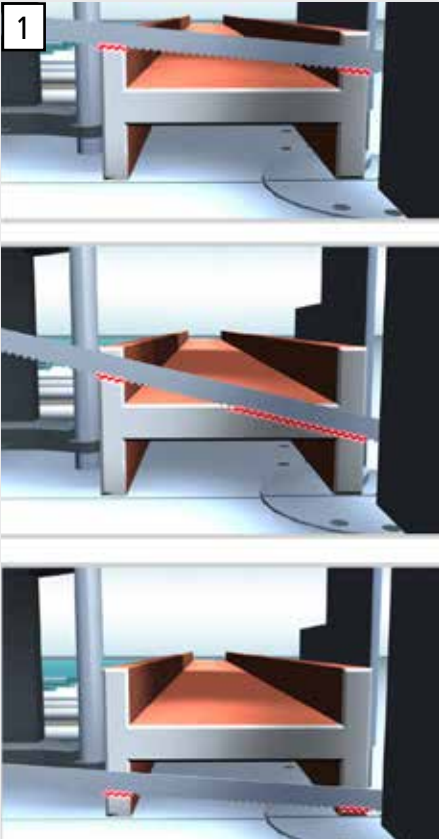
Mr Schreiber, plant manager at
SFB Schönebecker Fahrzeugbau GmbH



KBS 620 DG at SFB Schönebecker Fahrzeugbau GmbH.

KBS 761 DG | 1051 DG | 1351 DG
FOR CUTTING STEEL PROFILES TO THE HIGHEST STANDARDS

H T L U - O □



Auto Feed Control automatically adjusts the tilt angle of the saw band to suit the profile to significantly reduce cutting times (up to 50 %).



Saw feed with ball screw and servomotor for constant, temperature-independent feed.



Band position change initiated automatically to minimise idle times.



All maintenance components have been purposefully positioned for ease of access.



Autosorter for fully automated transportation of small good parts to several sorting positions.

TECHNICAL DATA	KBS 761 DG	KBS 1051 DG	KBS 1351 DG
Working range max. [mm]			
90 °	750 x 500	1030 x 500	1330 x 600
+ 70 °	710 x 500	980 x 500	1260 x 600
- 70 °	690 x 500	960 x 500	1230 x 600
+ 60 °	650 x 500	900 x 500	1170 x 600
- 60 °	620 x 500	880 x 500	1120 x 600
+ 45 °	530 x 500	740 x 500	960 x 600
- 45 °	490 x 500	700 x 500	900 x 600
+ 40 °	490 x 500	680 x 500	880 x 600
- 40 °	445 x 500	635 x 500	810 x 600
+ 30 °	380 x 500	525 x 500	690 x 600
Working range min. [mm]	30 x 10	30 x 10	50 x 10
Drive power [kW]	12.9	12.9	15.9
Cutting speed [m/min]	15 - 180	15 - 150	15 - 150
Saw band feed [mm/min]	0 - 600	0 - 600	0 - 600
Rapid feed and return [mm/min]	6000	6000	6000
Saw band material	Bimetal and carbide	Bimetal and carbide	Bimetal and carbide
Saw band dimensions (L x W x H) [mm]	8320 x 1.6 x 54	8900 x 1.6 x 54	10300 x 1.6 x 67
Machine weight [kg]	5500	6000	7700
Machine dimensions (L x W x H) [mm]	4080 x 1435 x 2650	4370 x 1435 x 2650	4900 x 1850 x 3000



"We bought our first KALTENBACH machine in 1974 and have been more than happy with it for 40 years. This service life is testament to the high quality of KALTENBACH products and the company's well-trained service technicians. We have no doubt that the KDM 1051 and the KBS 1051 DG will also give us years of sterling service."

Gabriele Faßhauer, managing director of Stahlbau Fasshauer GmbH



KBS 1051 DG at Stahlbau Fasshauer GmbH.

KBS 1301 DG | 2101 DG

FOR CUTTING HEAVY STEEL PROFILES

H T L U - O □



Double clamping system securely retains material during cutting process for lower vibrations to prolong band life.



Hydraulically raisable supply rollers for removing short pieces.



Sensors detect rotational speed of both saw wheels to avoid slippage.



Mitre adjustment without length correction for maximum mitre cutting quality.



NC-controlled cutting-angle setting on guide rails enable mitre cuts on very large steel profiles.



Movable roller conveyor automatically transports short parts through the sawing area with mitre settings.

TECHNICAL DATA	KBS 1301 DG	KBS 2101 DG
Working range max. [mm]		
90 °	1300 x 700	2100 x 800
+ 70 °	1200 x 700	1950 x 800
- 70 °	1200 x 700	1950 x 800
+ 60 °	1100 x 700	1780 x 800
- 60 °	1100 x 700	1780 x 800
+ 45 °	850 x 700	1420 x 800
- 45 °	850 x 700	1420 x 800
+ 40 °	760 x 700	1270 x 800
- 40 °	760 x 700	1270 x 800
+ 30 °	560 x 700	960 x 800
Working range min. [mm]	50 x 15	80 x 15
Drive power [kW]	9.2	11
Cutting speed [m/min]	15 - 100	15 - 100
Saw band feed [mm/min]	0 - 300	0 - 300
Rapid feed and return [mm/min]	2500	5000
Saw band material	Bi-Metall	Bi-Metall
Saw band dimensions (L x W x H) [mm]	9800 x 1.6 x 67	11640 x 1.6 x 80
Machine weight [kg]	7000	11300
Machine dimensions (L x W x H) [mm]	5010 x 1650 x 3105	6240 x 1680 x 3580



Straight and mitre cuts with excellent precision.



KBS 1301 DG at F. Hackländer GmbH.

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

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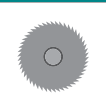
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TECHNICAL DATA		HDM 1432
Working range max. [mm]		
	90 °	1200 x 450
	+ 70 °	1008 x 302
	- 70 °	1008 x 302
	+ 60 °	1008 x 302
	- 60 °	1008 x 302
	+ 45 °	716 x 304
	- 45 °	716 x 304
	+ 35 °	524 x 304
Working range min. [mm]		50 x 50
Drive power [kW]		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



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



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



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



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



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



NC-controlled cutting angle setting for precise positioning.



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



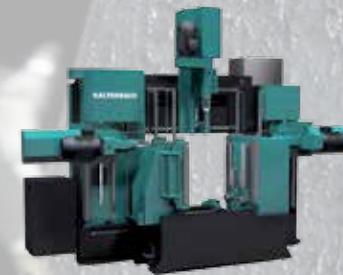
HDM 1432 at F. Hackländer GmbH.

DRILLING

KALTENBACH DRILLING MACHINES

ADVANTAGES AT A GLANCE:

- ▶ Robust, low-vibration design prolongs machine and tool life
- ▶ Efficient drilling, contour-marking, centre-marking, counter-sinking and thread-cutting on all three drill axes simultaneously
- ▶ Powerful clamping system reliably holds material and reduces vibrations to prolong tool life
- ▶ Intelligent material measurement integrated into clamping system for greater process reliability
- ▶ Rapid/working feed concept for shorter idle times
- ▶ Servomotor and ball screw for high-precision drill axis positioning and feed control
- ▶ A saw can be incorporated to create a saw-drill combination



KDE 603 | 1003

Basic drilling machine for small businesses with simple drilling applications and relatively small machining requirements.

- ▶ Manual quick-change chuck and tool length measuring
- ▶ Tool-oriented processing minimises tool changes



KDM 615 | 1015

Fully automatic drilling machine for small and medium steel profiles for users with more extensive machining requirements.

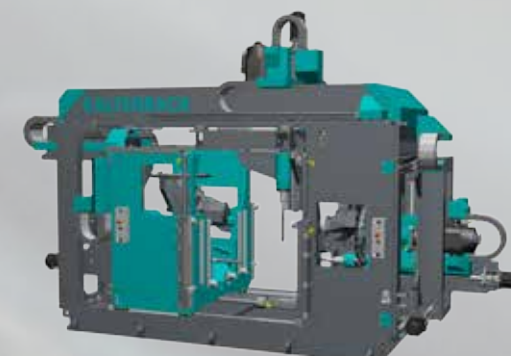
- ▶ Powerful drives and modern spindle construction for high-performance machining
- ▶ Automatic tool-change system with space for 5 tools per drilling axis
- ▶ Software macros for simple, fast programming when milling standard contours
- ▶ Carbide and solid carbide drills can be used to significantly reduce production times



KDL 1318 | 2118

Fully automatic drilling machine for medium and large steel profiles for users with more extensive machining requirements.

- ▶ Powerful drives and modern spindle construction
- ▶ Automatic tool-change system with space for 6 tools per drilling axis
- ▶ Software macros for simple, fast programming when milling standard contours
- ▶ Carbide and solid carbide drills can be used to significantly reduce production times



KDP 736 | 1036 | 1336

Fully automatic drilling machine for small, medium and large steel profiles for users with highly diverse machining requirements and large tonnages.

- ▶ Powerful drives and modern spindle designs ensure excellent machining results
- ▶ Additional feed axis traversing max. 500 mm and simultaneous sawing for boosting productivity by up to 50%
- ▶ Two spindle configurations optimised for milling and drilling operations
- ▶ Automatic tool-change system with space for 12 tools per drilling axis ensures short setup times and greater flexibility
- ▶ Software macros for simple, fast programming when milling standard contours
- ▶ Carbide and solid carbide drills can be used to significantly reduce production times

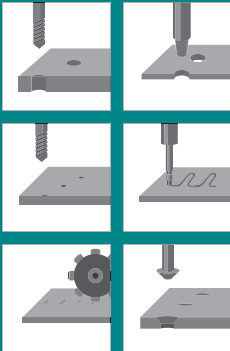
KDE 603 | 1003

THE SOLUTION FOR LIGHT TO MEDIUM-DUTY STEEL FABRICATION

H T L U - O □



TECHNICAL DATA	KDE 603	KDE 1003
Working range max. [mm]	600 x 500	1000 x 500
Working range min. [mm]	50 x 5	50 x 5
Machining unit	3	3
Max. speed [rpm]	1600	1600
Max. torque [Nm]	146.7	176.7
Drive power per axis [kW]	5	5
Feed [mm/min]	1500	1500
Positioning - rapid advance [m/min]	11	11
Material transport speed [m/min]	30	30
Cooling	internal + external	internal + external
Drill type	HSS	HSS
Drill diameter [mm]	6 - 31.75	6 - 31.75
Machine weight [kg]	3500	3800
Machine dimensions (L x W x H) [mm]	3510 x 1500 x 2470	3910 x 1500 x 2470



Efficient drilling, contour-marking, centre-marking, counter-sinking and thread-cutting on all three drill axes.



Intelligent material measurement integrated into clamping system for greater process reliability.



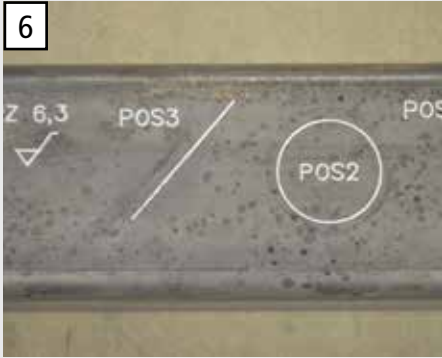
Quick-change chuck for simple, manual tool changes.



Swarf conveyor or swarf tray for convenient swarf removal.



Servomotor and ball screw for exact drill axis positioning and feed control.



Contour marking of the material on up to four sides is possible in order to shorten downstream processes.



"Our KALTEBACH machines have enabled us to increase our productivity. KALTEBACH's comprehensive package is perfect and totally reliable."

Heinz Hirt, managing director of Hirt Schlosserei und Metallbau GmbH

KDE 603 at Hirt Schlosserei und Metallbau GmbH.

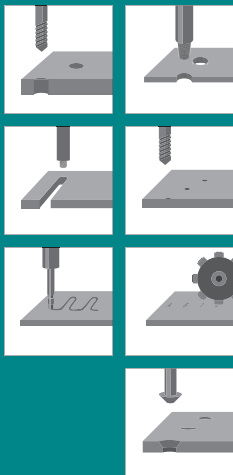
KDM 615 | 1015

DYNAMIC PROCESSING FOR COMPLEX TASKS

H T L U - O □



TECHNICAL DATA	KDM 615	KDM 1015
Working range max. [mm]	600 x 500	1000 x 500
Working range min. [mm]	50 x 5	50 x 5
Machining unit	3	3
Max. speed [rpm]	2500	2500
Max. torque [Nm]	422	422
Drive power per axis [kW]	29.5	29.5
Feed [mm/min]	1500	1500
Positioning - rapid traverse [m/min]	11	11
Material transport speed [m/min]	30	30
Tool changer x magazine places	3 x 5	3 x 5
Cooling	internal + external	internal + external
Drill type	HSS, HM, VHM	HSS, HM, VHM
Drill diameter [mm]	6.8 - 50	6.8 - 50
Machine weight [kg]	6000	6500
Machine dimensions (L x W x H) [mm]	4570 x 1670 x 3750	5370 x 1670 x 3750



Sturdy, low maintenance system for optimum material clamping and longer tool life.



Powerful drives and modern spindle construction for high-performance machining.



Tool length sensing with self-cleaning laser light barrier for low-maintenance operation plus high process reliability and short idle times.



Robust, low-vibration machine design for long service life and low maintenance and tool costs.



Automatic, reliable, low-maintenance tool changer with space for five tools per drilling axis.



Milling operations are easy to perform with macros and made more efficient through the use of KALTENBACH Power Tools.



Drilling, thread-cutting, contour-marking, counter-sinking, milling of long holes and notches.



KDM 615 at Stahl- und Anlagenbau Schädlich GmbH.

KDL 1318 | 2118

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

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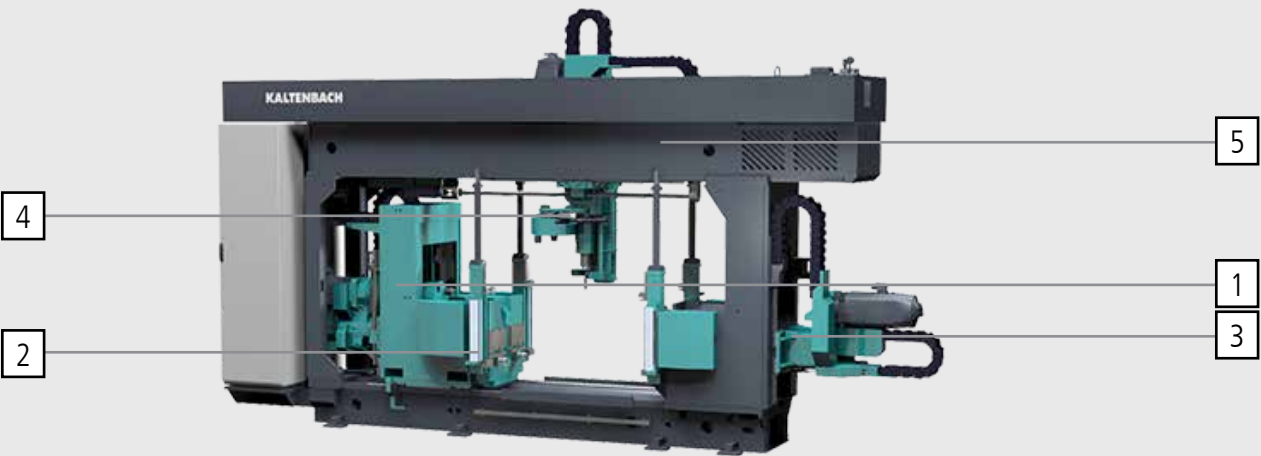
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1
Tool change operation for simple and secure change of tools.



2
Tool length sensing with self-cleaning laser light barrier for low-maintenance operation plus high process reliability and short idle times.



3
Machining axis with powerful drives travels with clamping device for greater rigidity and stability.

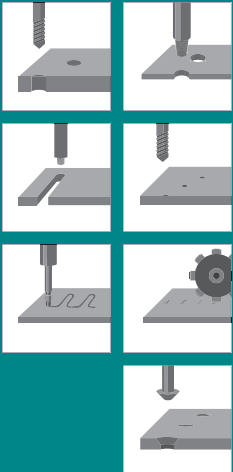


4
Automatic, reliable, low-maintenance tool changer with space for six tools per drilling axis.



5
Robust design for long machine life.

TECHNICAL DATA	KDL 1318	KDL 2118
Working range max. [mm]	1300 x 500	2100 x 700
Working range min. [mm]	60 x 10	60 x 10
Machining unit	3	3
Max. speed [rpm]	2500	2500
Max. torque [Nm]	544	544
Drive power per axis [kW]	34.5	34.5
Feed [mm/min]	2000	2000
Positioning - rapid traverse [m/min]	15	15
Material transport speed [m/min]	30	30
Tool changer x magazine places	3 x 6	3 x 6
Cooling	internal + external	internal + external
Drill type	HSS, carbide, solid carbide	HSS, carbide, solid carbide
Drill diameter [mm]	6.8 - 50	6.8 - 50
Machine weight [kg]	11600	14500
Machine dimensions (L x W x H) [mm]	6260 x 1190 x 3700	7750 x 1190 x 4000



Handles particularly large and heavy profiles with ease.



KDL 1318 at China Construction Second Engineering Bureau Co., Ltd.

KDP 736 | 1036 | 1336

PRODUCTIVE, PARALLEL, VERSATILE MACHINING

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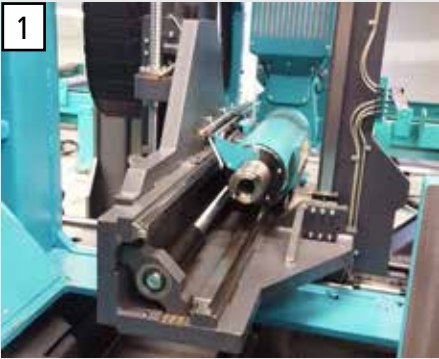
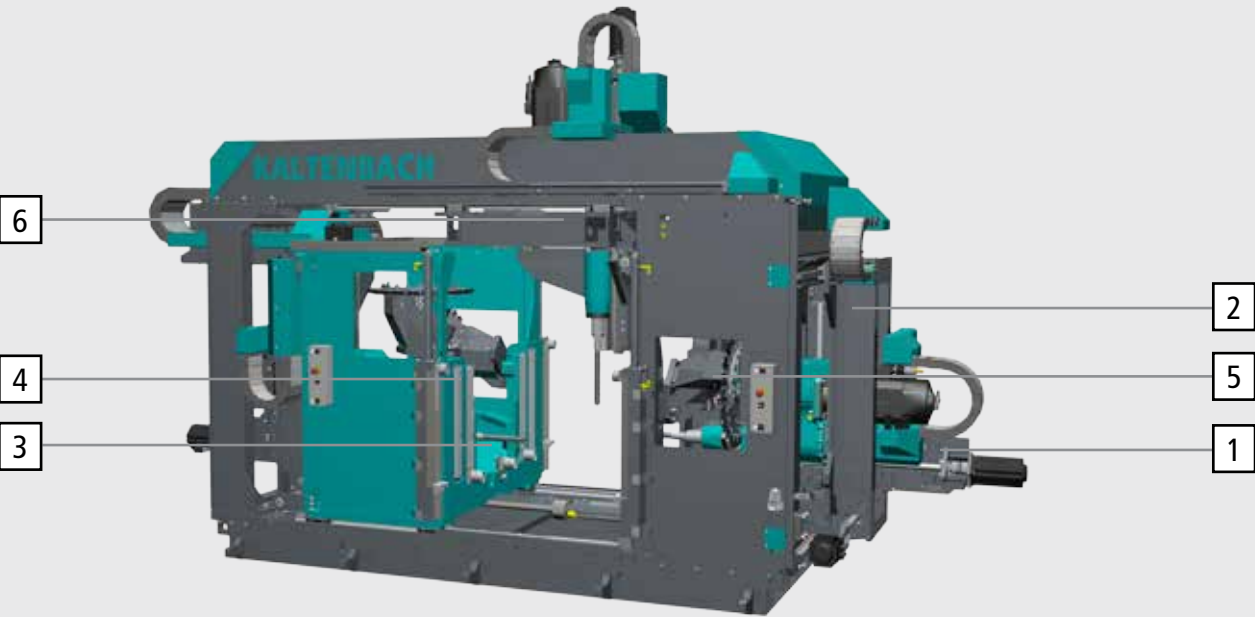
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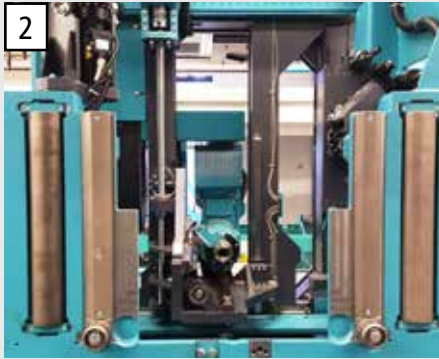
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Powerful drill drive with gearbox for very high torques; ideal for the very latest drilling tool technologies and large diameters.



Drilling axes mounted directly on machine portal and clamping device ensure short traversing distances for shorter processing times and low-vibration machining.



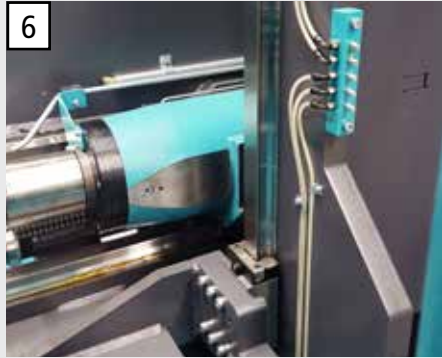
Additional feed axis traversing max. 500 mm in material flow direction so that a workpiece can be machined from all three sides simultaneously and independently.



Powerful clamping system based on a combination of rollers and clamping jaws to reduce vibrations and shorten throughput times.

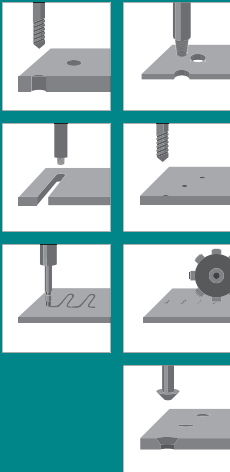


Large tool-changer with space for 12 tools per drilling axis to ensure short setup and tool-change times plus a good selection of tools.



Readily accessible centralised lubrication point for quick and simple maintenance.

TECHNICAL DATA	KDP 736	KDP 1036	KDP 1336
Working range max. [mm]	750 x 600	1030 x 600	1330 x 600
Working range min. [mm]	50 x 5	50 x 5	50 x 5
Machining unit	3	3	3
Max. speed [rpm]	3500 (5150)	3500 (5150)	3500 (5150)
Max. torque [Nm]	544 (368)	544 (368)	544 (368)
Drive power per axis [kW]	34.5	34.5	34.5
Feed [mm/min]	2000	2000	2000
Positioning - rapid traverse [m/min]	22	22	22
Material transport speed [m/min]	30	30	30
Tool changer x magazine places	3 x 12	3 x 12	3 x 12
Cooling	internal + external	internal + external	internal + external
Drill diameter [mm]	6.8 - 50	6.8 - 50	6.8 - 50
Machine weight [kg]	12900	13200	13500
Machine dimensions (L x W x H) [mm]	6260 x 2100 x 3900	6560 x 2100 x 3900	6860 x 2100 x 3900



Powerful parallel machining for drilling, countersinking, thread-cutting, milling, contour marking and centre-marking.



KDP 1336 in the KALTENBACH Technology Centre.

COPING

KALTENBACH COPING ROBOT



KC 1201

- ▶ Robust, low-vibration design for optimum production quality
- ▶ Automatic calibration
- ▶ Fully enclosed to ensure high operational safety
- ▶ Automatic generation of robot program from 3D data or DSTV files
- ▶ Machining simulation and collision control for trouble-free operation
- ▶ 3D images of workpieces
- ▶ Suitable for plasma or oxy-fuel cutting
- ▶ Plasma marking possible
- ▶ Simple enter and fully automatic processing without programming skills
- ▶ Consistently high quality, even with complex cutting processes

KC 1201

THE COPING ROBOT WITH EIGHT AXES

H T L U -



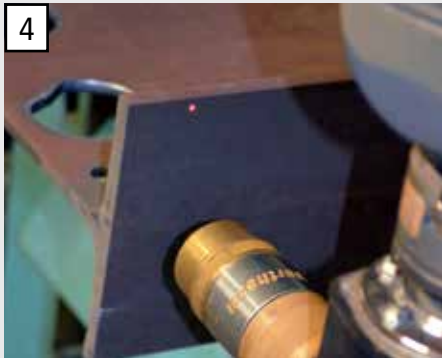
Robotic movements controlled by powerful servo drives for ultra-precise positioning.



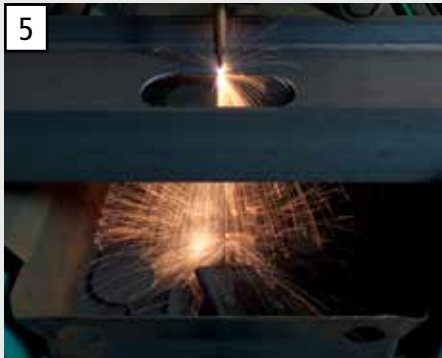
Hydraulic folding roller conveyor segments with integrated workpiece clamping device allow easy removal of sections and handling of small parts.



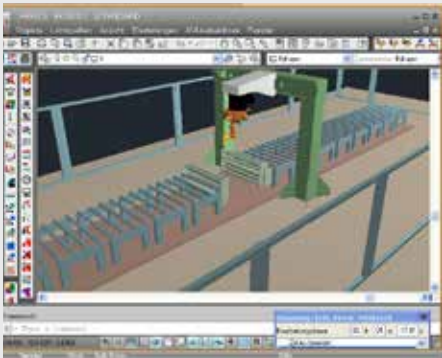
Different cutting technologies can be used, depending on material and accuracy requirements.



Optical laser distance sensor for contactless measurement of material.

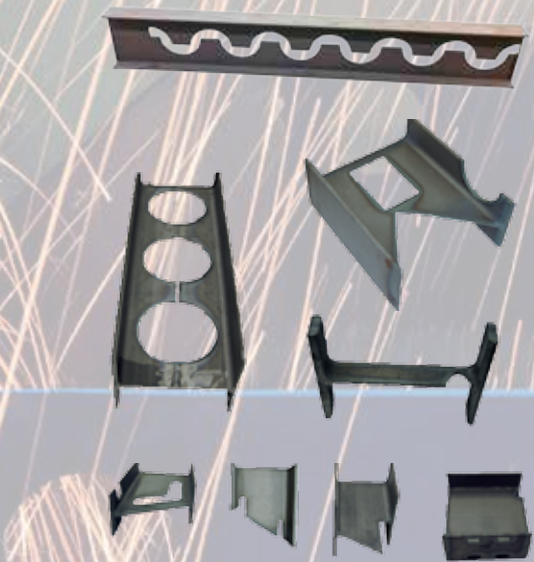


Hydraulically powered slag car for easy handling.



Modern software components enable simulations, feasibility tests and collision control.

TECHNICAL DATA	KC 1201
Working range max. (B x H) [mm]	1200 x 450
Internal working range [mm]	1000
Number of axes	8
Chamfer angle	up to 45°
Working height [mm]	640
Machine weight (+ housing) [kg]	5900 (+1500)
Machine dimensions (L x W x H) [mm]	4100 x 5000 x 3300



For chamfers, internal contours, longitudinal cuts, slots, holes, mitre cuts, combined mitre cuts (two-angle cut) and straight cuts and many more.



KC 1201 at Stürmsfs AG.

THERMAL CUTTING OF SHEET STEEL

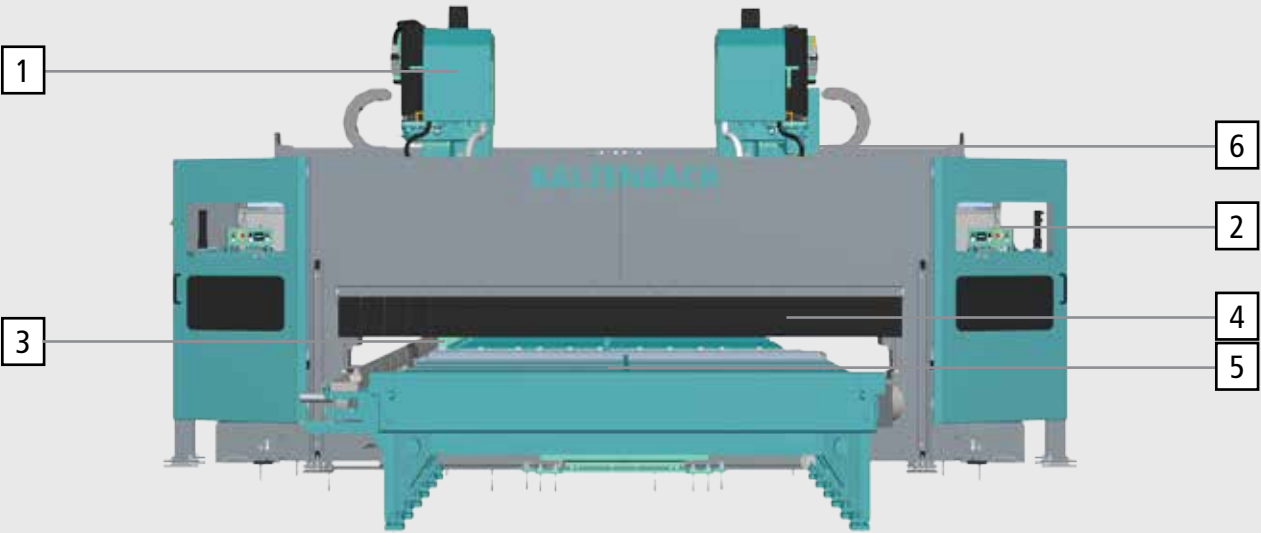
KALTENBACH PLATE PROCESSING CENTRES

KF 1614 | 2114/28 | 2614/28 | 3114/28

- ▶ For drilling, milling, thread-cutting, counter-sinking, centre-marking, contour-marking and plasma or oxy-fuel cutting sheet steel
- ▶ Powerful drill spindle with high torque; ideal for the very latest drilling tool technologies and large diameters
- ▶ Measuring carriage takes up little space
- ▶ Fast axis traversing speeds
- ▶ Durable designs provide the basis for this long-term investment
- ▶ Professional software suite from Lantek
- ▶ Common cut and cross-cut technology ensures less wastage
- ▶ Four different models to cover the 1600, 2100, 2600 and 3100 plate widths – easily adapted to customer specifications
- ▶ Powerful milling operations with optional hold-down roll and different milling strategies in order to do justice to the requirements of different milling tools and to enable more efficient, more cost-effective production
- ▶ Optional hard marking unit for fast marking operations
- ▶ Use of oxy-fuel and/or plasma cutting methods
- ▶ High spindle speeds ideal for milling
- ▶ 14-place tool changer for faster setup times
- ▶ Measuring carriage at the side runs through the machine to optimise plate fixation throughout the entire machining process
- ▶ Two processing units for parallel machining and higher efficiency
- ▶ Fully automatic handling of small parts
- ▶ Rotating swarf brush for automatic clearing of chips in front of cutting processes
- ▶ Various infeed/outfeed transport options for more effective material flows
- ▶ Automatic material and tool sensing

KF 1614 | 2114/28 | 2614/28 | 3114/28

THE MACHINE FOR VERSATILE AND PRODUCTIVE PLATE PROCESSING



Second machining unit available as an option for increasing productivity by up to 100%.



14-place tool changer per axis for faster setup times.



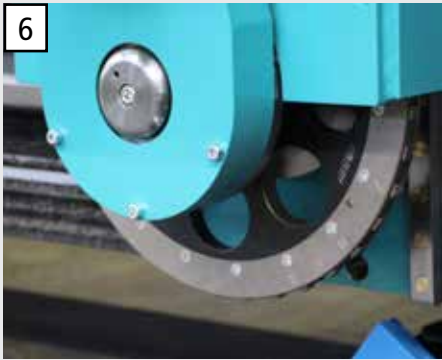
Two measuring carriages measure plates automatically and position them exactly. Material fixed by side grippers that pass through the machine portal.



Prior to the thermal cutting process, a special brush removes swarf automatically and reliably to ensure good thermal cutting and reduce the risk of wear.

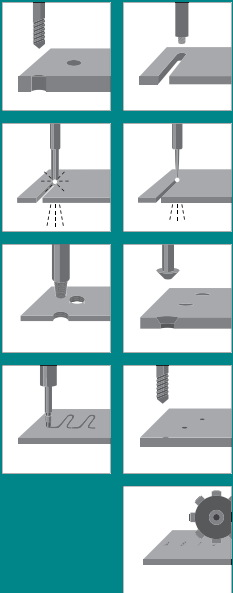


Fast, automatic ejection of small parts for greater automation and machine utilisation.



Fast, reliable marking system for short production times and good traceability.

TECHNICAL DATA	KF 1614	KF 2114 /28	KF 2614 / 28	KF 3114 /28
Plate starting material max. [mm] (optional)	1600 x 6000 (12000)	2100 x 6000 (12000)	2600 x 6000 (12000)	3100 x 6000 (12000)
Plate starting material min. [mm]	220 x 500	220 x 500	220 x 500	220 x 500
Plate thickness, starting material [mm]	6 - 100	6 - 100	6 - 100	6 - 100
Machining unit	1	1/2	1/2	1/2
Max. speed [rpm]	3500 (5150)	3500 (5150)	3500 (5150)	3500 (5150)
Max. torque [Nm]	544 (368)	544 (368)	544 (368)	544 (368)
Spindle drive power [kW]	34.5	34.5	34.5	34.5
Spindle feed [mm/min]	0 - 2000	0 - 2000	0 - 2000	0 - 2000
Machining unit – positioning – rapid traverse [m/min]	24	24	24	24
Material transport speed [m/min]	30	30	30	30
Tool changer x magazine places	1 x 14	1/2 x 14	1/2 x 14	1/2 x 14
Drill type	HSS, carbide, solid carbide	HSS, carbide, solid carbide	HSS, carbide, solid carbide	HSS, carbide, solid carbide
Cooling	internal + external	internal + external	internal + external	internal + external
Drill diameter range [mm]	6.8 - 50	6.8 - 50	6.8 - 50	6.8 - 50
Thread diameter range [mm]	M8 - M30	M8 - M30	M8 - M30	M8 - M30



Drilling, counter-sinking, milling, thread-cutting, contour- marking, hard stamping and thermal cutting on a single machine.



KF 2128 at H. Hardeman BV.

SOFTWARE FOR PROFESSIONALS

KALTENBACH has spent years developing steel fabrication software for individual machine types. All our software packages are powerful and user-friendly. Each machine software is tailored to the unique features of the machine, and can also be customised. The provision of machine hardware and software from a single source ensures seamless compatibility. Integrated service tools ensure that KALTENBACH Support can quickly deal with any problems that may arise. As well as developing our own software systems at KALTENBACH, we also work with respected software providers to integrate the universal features and expertise of the best in the industry into our systems.

Order Manager



- ▶ Management of order and order positions (good parts)
 - ▶ Features of good parts can be defined
 - ▶ Processing operations and their position can be defined
 - ▶ Good part with processing operations are visualised
 - ▶ Values for good part specification can be entered manually or imported (see DSTV-Import)
- ✓ Clear software structure
 - ✓ Easy and intuitive operation
 - ✓ High process safety due to visualisation

Production Manager



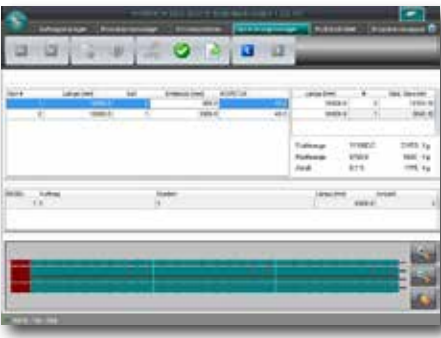
- ▶ Input material can be specified
 - ▶ Nesting of good parts on raw material possible manually or automatically (see Optimisation Manager)
 - ▶ Nesting is visualised
 - ▶ Several information are provided (e.g. rest material, ...)
- ✓ Automated production in a few steps
 - ✓ High process safety due to visualisation

DSTV-Import



- ▶ Import interface e.g. for data from CAD programmed
 - ▶ Part viewer:
 - > Visualisation of good piece
 - > DSTV-Code
 - > Representation of coordinate system
 - ▶ Further import formats: DWG, DXF (only as single parts – not whole constructions)
- ✓ Import in a few steps
 - ✓ Several file representations before the import

Optimisation Manager

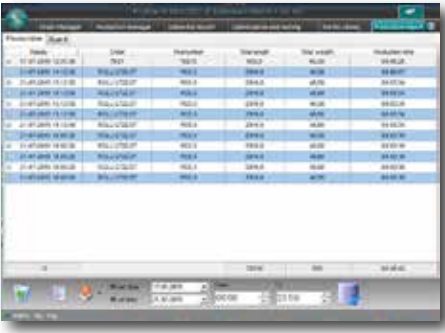


- ▶ Good parts from all orders can be nested automatically on raw material
 - ▶ Reduction of waste for perfect material usage
 - ▶ Several information provided (scrap rate, weight, ...)
- ✓ Reduction of waste
 - ✓ Great material utilisation in a few steps

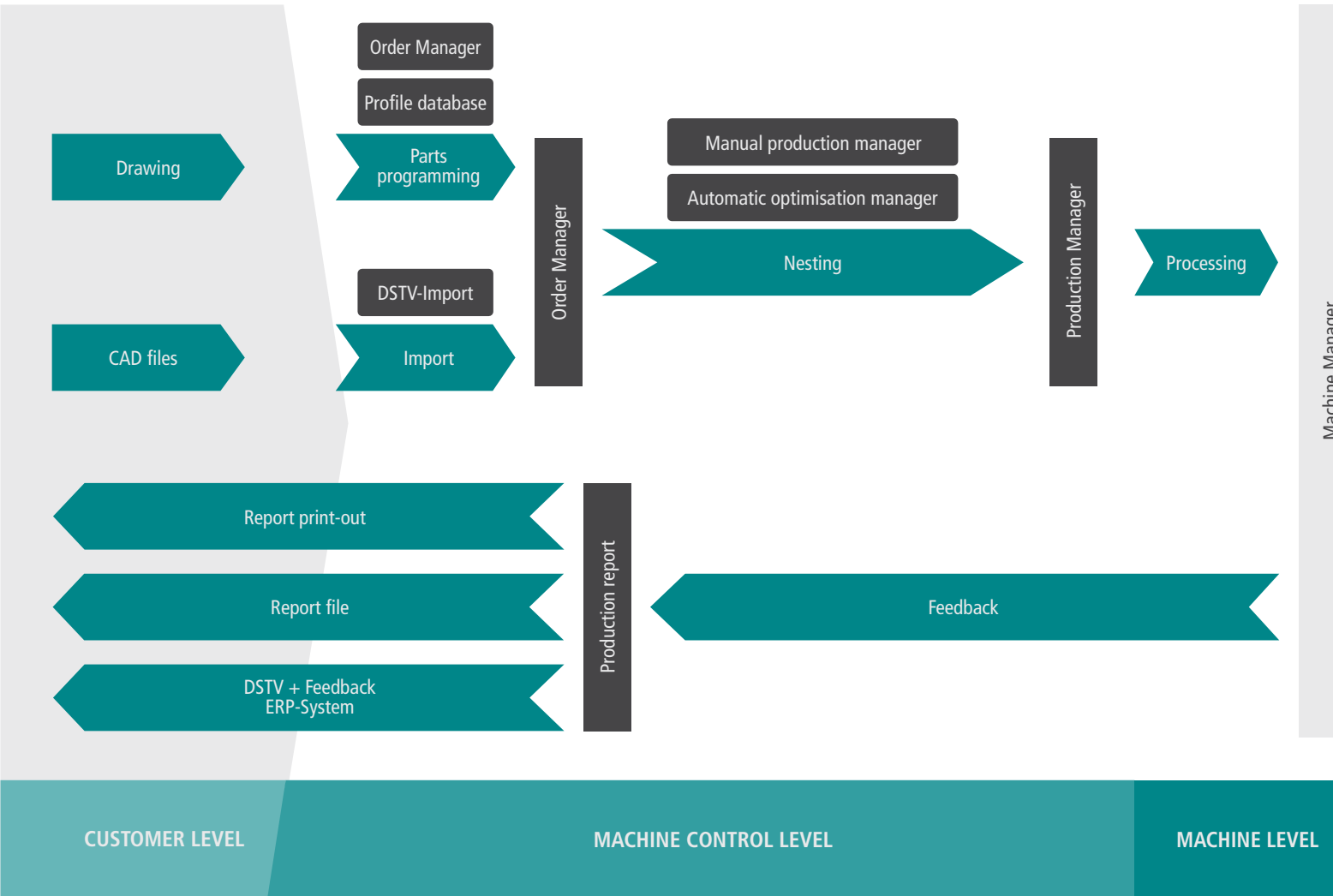
Profile Library



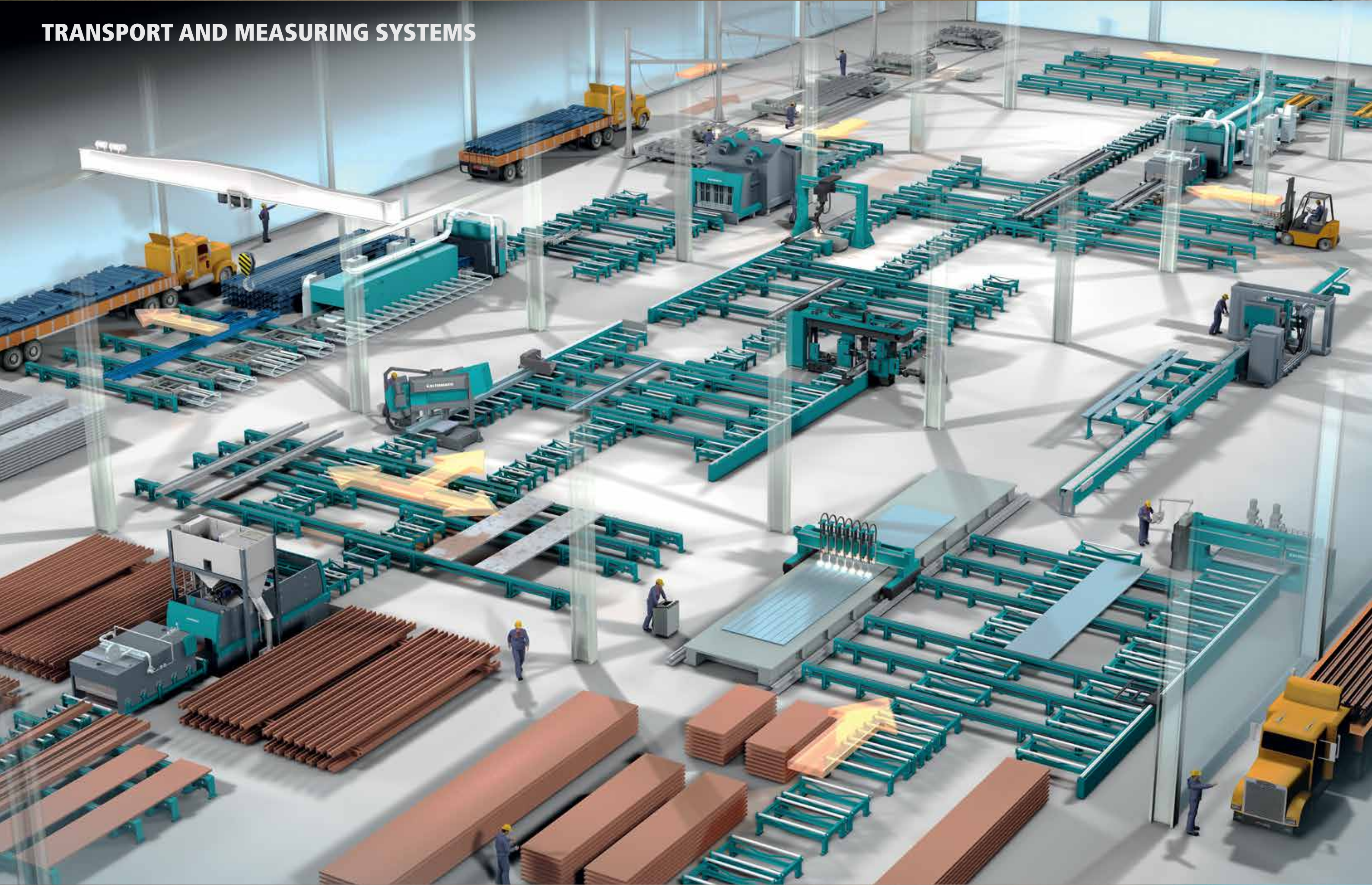
Production Report



- ▶ Overview about material dimensions and steel grades
 - ▶ Pre-defined list of international normed material
 - ▶ Material dimensions and steel grades can be added and deleted
 - ▶ Filtering options are provided
 - ▶ Meaning of dimension parameter are visualised
- ✓ Customised adjustments of databases
 - ✓ Fast search and filter
 - ✓ High process reliability due to visualisation
-
- ▶ Provides information about processing e.g. time stamp of finishing product, length, weight, production time
 - ▶ Several export formats (e.g. CSV, HTML, Word, ...)
 - ▶ Filter option by period
 - ▶ Detailed information regarding orders and raw material
 - ▶ Forecast of production time possible
 - ▶ Connection to ERP system via DSTV-Feedback-File
- ✓ Production data can be used for cost or order calculations
 - ✓ Versatile analysis and forecast opportunities

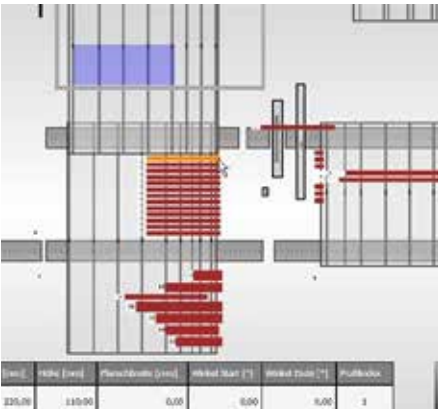


TRANSPORT AND MEASURING SYSTEMS



TRANSPORT SYSTEMS

ROLLER CONVEYOR



Material visualisation and tracking.



Robust construction capable of handling up to 1000 kg/m

CROSS-CONVEYORS



Cross-conveyor with drag chains for robust and low-maintenance transport.



Cross-conveyor with lifting pins for conveyance in two directions.

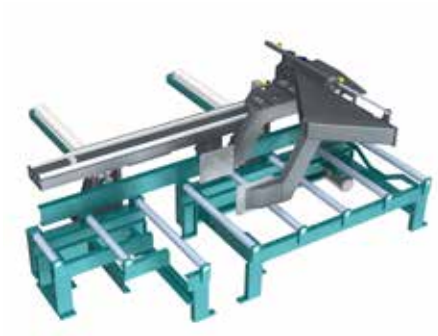


Cross-conveyor with lifting carriage especially for profile bundles, layers and plates.

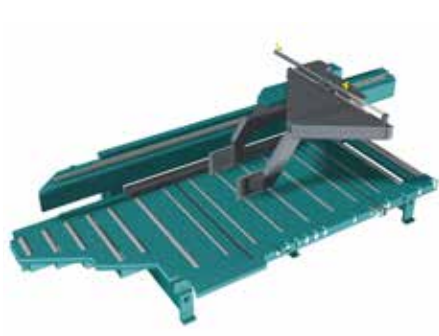
SHUNTING EQUIPMENT



Pusher for easy removal of short good parts and even heavy parts.



Short piece gripper for the rational removal of short parts.



Automatic removal of good parts on/to up to six sorting positions.

MEASURING SYSTEMS

INFEED



Measuring carriage with pusher.



Measuring carriage with grippers to ensure material contact.



Measuring carriage with double grippers for use in a small footprint.



Measuring carriage for gripping pipes.

System	Measuring carriage					Infeed gripper
Name	M150	M151	M152	M154	M158	NA
Explanation	Pusher	1-profile-gripper*	1-profile-gripper*	Round pipe gripper*	Variants: G -> M151 GG -> M152 GT -> M154	Clamping and positioning unit
Technology	Sawing, Drilling	Sawing, Drilling, Milling*, Contour-marking*			Coping*	Sawing

* Also compatible with pusher, in which case not possible for milling, contour-marking and coping.

OUTFEED



Length stop LS220.



Length stop LS270.

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



► 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

► 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.

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

WWW.KALTENBACH.COM

Product videos:

WWW.YOUTUBE.COM/KALTENBACHGROUP

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KALTENBACH GMBH + CO. KG

Blasiring 4, D-79539 Lörrach

Telefon: +49 7621/175-0

E-Mail: info@kaltenbach.de

www.kaltenbach.com

