



KASTOtec AC.

High-tech for the economic use of bi-metal and carbide saw bands.



More productivity with the new KASTOtec models.

It's an open secret that the economic use of automatic sawing machines consists of two things: High metal-cutting performance on the one hand and low non-productive times on the other. The KASTOtec AC was developed for the optimal use of the bi-metal, bi-metal plus, carbide and carbide plus tool technologies offered on the market. In this way, optimal productivity is achieved with a higher cutting performance and a more economic use of carbide bands. The control system used in the machine enables the automatic assignment and lasting storage of the cutting technology adapted to the respective material qualities and the saw band used (bi-metal or carbide). This doesn't just lower tool costs, it also results in significantly shorter cutting times - depending on the saw band, savings of 50 per cent and more are possible. The simple operation and the well-designed material handling reduce downtimes and thus create the best conditions for optimum economic efficiency.



The new KASOTtec AC models combine solid heavy engineering with innovative control technology. A continuously adjustable electromechanical saw feed with two servomotors and ball screw spindles offer the best conditions for an efficient, precise sawing that is less wearing on the tools.

PRECISION

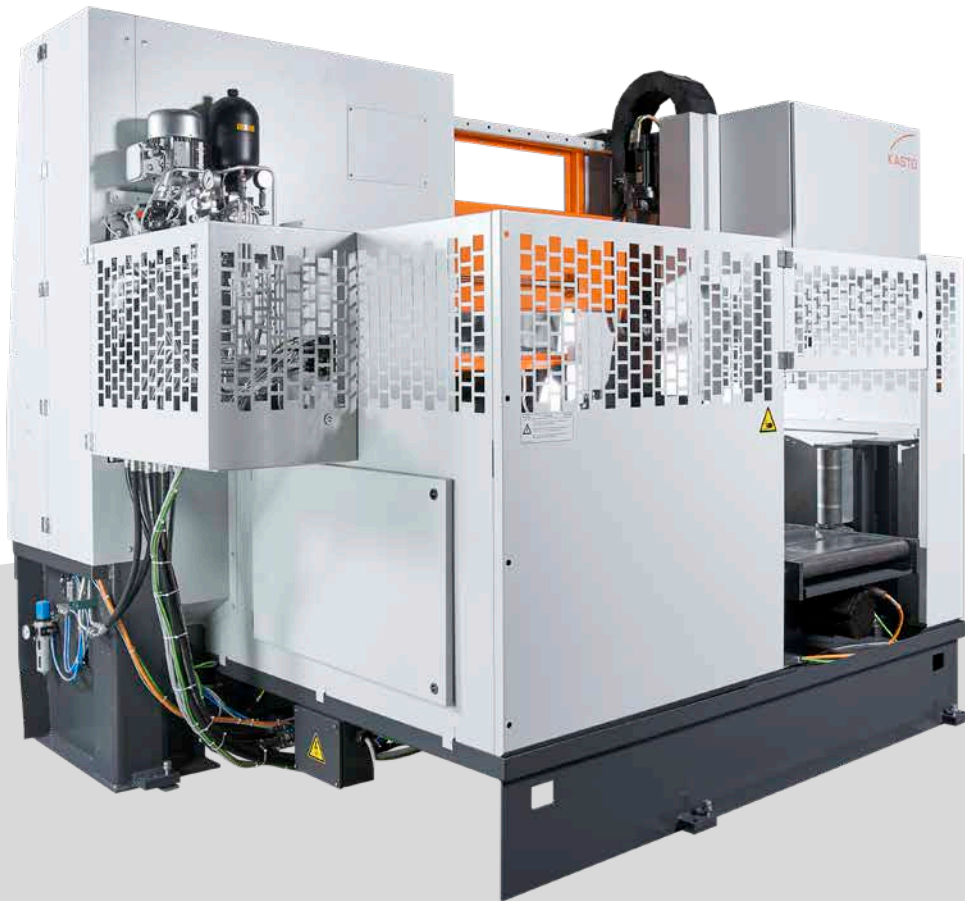
U-shaped band guide head with newly designed lateral guide for optimum contact pressure of the saw band. Double bearing of the wheels, saw unit guide by two columns. Vibration damping by introducing mineral casting into the saw frame and vibration guides on the return run.

SMOOTHER RUNNING

The use of mineral casting ensures a high degree of damping and maximum smoothness of the saw band, even for materials that are difficult to machine.

This results in shorter cutting times and longer service life of the saw band.



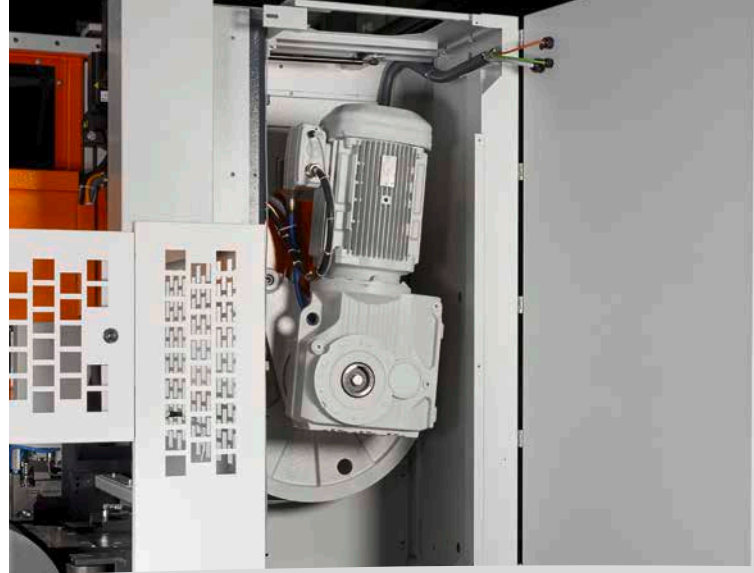
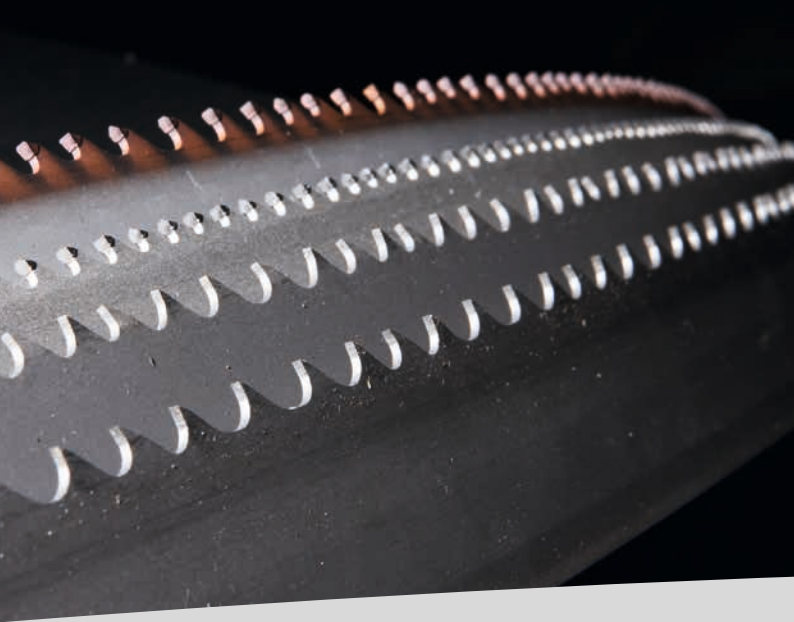


ENERGY EFFICIENCY

All saws in the model range have frequency-controlled saw motor drives of energy efficiency class IE3, which enable cutting times from 30 to 300 meters per minute, as well as having servo drives for material and saw feed. The hydraulics are also designed to the highest energy efficiency possible.

This results in the following savings:

- Energy savings in hydraulics of approx. 93 % *
- Overall energy savings: approx. 28 % (depending on the sawing task) *
- Use of the latest servo technology
- High efficiency with small frame size
- Intelligent converter technology for optimum drive control
- As they are used exclusively for clamping functions, the hydraulics are only rarely activated and are therefore extremely efficient.
- The DC link coupling of the converters optimally exploits synergy effects.



Increase your productivity.

MORE TECHNOLOGY

A wide variety of tool technologies available on the market can be used, like for instance, bi-metal, bi-metal+, carbide and carbide+. Optimal performance data developed in co-operation with leading tool manufacturers.

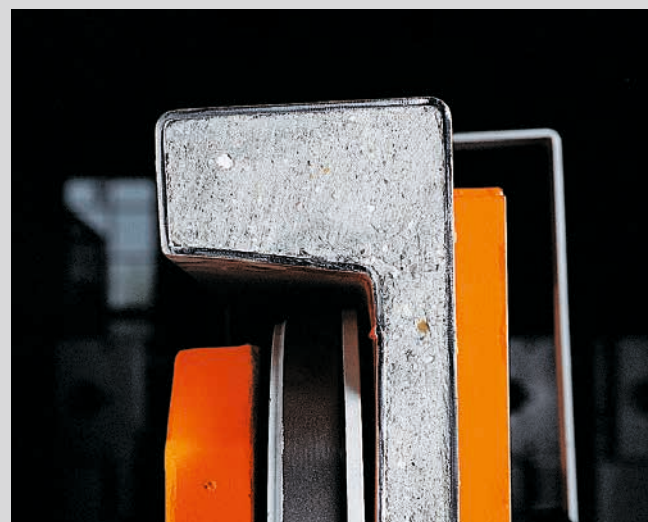
MORE POWER

The large-dimensioned, frequency-controlled saw drive with a cutting speed of 30 - 300 m / min (20 - 200 m / min with KASTOtec AC 8 and 8 x 10) guarantees a perfect cutting performance.

LONGER SERVICE LIFE

The starting point for the driving force qualities:

- maximum smooth running
- highest cutting performance even for hard-to-machine material qualities combined with best service life is the mineral-cast steel casing of the saw frame.





KASTO saw control systems: Ideal for every application.

KASTO *ProCONTROL*

... the ideal control system for optimal order processing

- Diskless industrial PC with 10"- colour touchscreen
- Software and data storage on exchangeable multi-media card
- Integrated materials and item management based on the data base
- Self-optimizing technology database based on the item, material and tool data as well as the current process parameters
- Pre-calculation of the order running time and machine-occupied times over the entire order memory, Storage and evaluation of all process, statistics and tool data
- Wide-ranging software options

KASTO *ExpertCONTROL*

... high performance for high demands

- latest generation industrial PC with 15" colour touchscreen
- Software and data storage on a hard disk
- The ExpertControl offers all the functions of the EasyControl. In addition, enhancements are available, for which a high-performance PC with a large data memory is vital.
- System for section management and sorting for integrating robotic solutions (KASTO*sort*)
- Integration of marking systems for identifying parts and traceability (e.g., KASTO*nailmark*)
- Integration of a bar management and bar optimization software KASTO*Optisaw*
- Integration in KASTO sawing systems (e.g. KASTO*center*, KASTO*sawcell*)
- Client for customer host systems (SAP, etc.) without additional hardware



KASTOrespond.

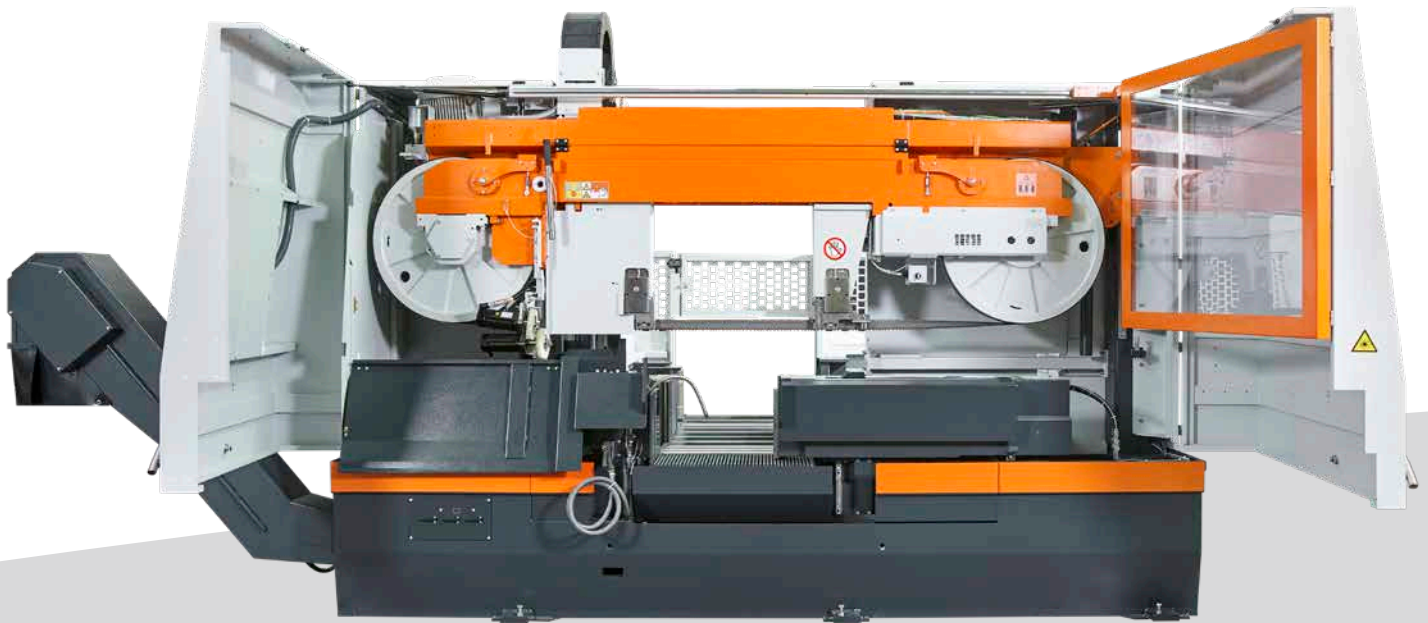
The new system *KASTOrespond*, specially developed for this series, offers the ideal machine adjustment for solid material, pipes and profiles in all material ranges and is available for every size. The system permanently records the forces on the tool without the use of additional and often error-prone sensors and intelligently converts these into the optimum digital feed speed rate. Thick-walled and thin-walled material, constantly changing contact length for round material and even hard spots in the solid material are recognized in good time by *KASTOrespond* and cleverly converted into the correct feed. The operator only needs to program the relevant data like section lengths, quantities and the type of material to be cut. *KASTOtec* takes care of everything else.

BENEFITS

Materials can have different sawing qualities, despite being in the same grouping. The same materials are often very different from a machining perspective because e.g. they come from different batches. Up to now, both were sawn using the same parameters. Now, by monitoring the cutting force, *KASTOrespond* detects if a material is easier to saw and increases the saw feed until the permissible target cutting force is reached.

The system also works very impressively when sawing pipes, profiles and pipe / profile bundles. In these applications, the conventional control system can hardly achieve anything, because the cutting forces and the contact lengths of the tool are permanently changing. Thus the machine is rarely in the optimal cutting range. This is where *KASTOrespond* is highly effective.

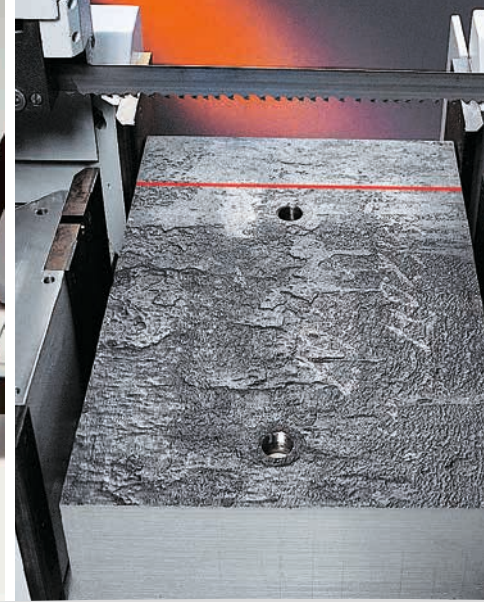
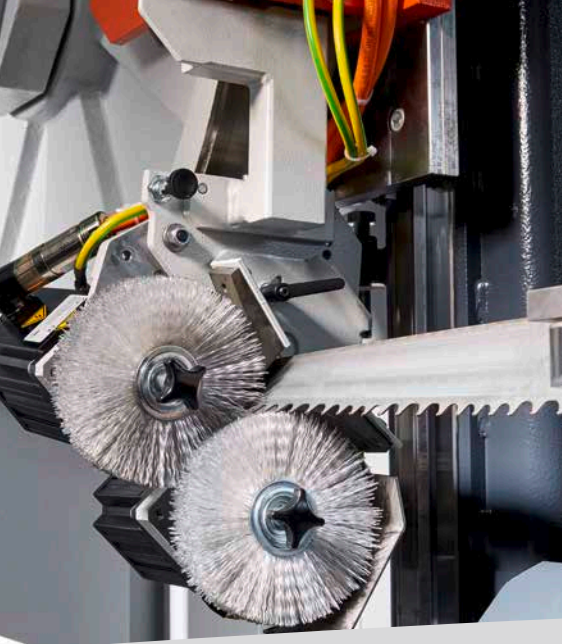
The system continuously regulates the cutting force so that it constantly moves at the permitted cutting force, but does not exceed it. In doing so, the saw feed optimizes itself without any intervention from the operator. This leads to optimal productivity that is also easy on tools.



Perfection from the factory: The standard features of the KASTOtec.

The KASTOtec offers several more time-saving benefits:

- Saw blade guide using hydraulically preloaded carbide sliding guides
- Electronic monitoring of the hydraulic saw band tension
- Continuously adjustable cutting speed, centrally adjustable
- Optimal saw band service life thanks to the patented belt-free stroke when lifting the saw frame
- 0 - degree start point for fully automatic positioning of the first cut
- Controlled saw feed movement using two ball screw spindles
- Optimal cleaning of the saw band by electric, motor-driven, self-adjusting chip-removal brushes
- Fast movement from servo drives and ball screw spindles for material feed and linear-guided saw frame
- Band guide arm automatically adjusts to the width of the material
- The saw machine control system ProControl is easy to operate and takes care of the crucial settings. Easy input of sawing orders with section lengths, quantities and material selection.
- Effective use of material up to a 35 mm short offcut
- New layout: Drive unit and sensors are separated from the actual work area - ensuring reliable and trouble-free operation
- Material clamping jacks with free-lift device ensure reliable automatic operation
- High cutting performance with impressive repeat accuracy
- Good accessibility despite compliance with current safety standards
- 50 % savings on wear and tear costs compared with predecessor machines



TECHNICAL SPECIFICATIONS KASTOtec		AC 4	AC 5	AC 8	AC 8x10
Cutting range	mm	430	530	830	270 - 830
Cutting range [H x W]	mm	430 x 430	530 x 630	830 x 830	830 x 270 - 1.100
Material feed length, single stroke	mm	600	600	750	750
Optional feed length, single stroke	mm	1.500 / 3.000	1.500 / 3.000	–	–
Multiple feed	mm	9.999	9.999	9.999	9.999
Minimum section length	mm	10	6	8	8
Minimum sawing diameter	mm	10	10	20	270 / 20 x 270
Minimum offcut length in automatic operation	mm	35	35	50	50
Cutting speed, continuous	m/min	30 – 300	30 – 300	20 – 200	20 – 200
Saw motor, frequency-controlled	kW	15	15	18,5	18,5
Total connected load for standard machine	kW	25	25	30	30
Saw band dimensions	mm	6.830 x 41 x 1,3	7.675 x 54 x 1,6	9.195 x 67 x 1,6	9.735 x 80 x 1,6
Saw band dimensions option I	mm	6.830 x 54 x 1,3	–	9.195 x 80 x 1,6	9.735 x 67 x 1,6
Saw band dimensions option II	mm	–	–	9.195 x 54 x 1,6	–
Material support height	mm	700	700	730	730
Length	mm	2.170	2.235	2.720	2.720
Width incl. chip conveyor	mm	4.720	5.335	4.900	5.160
Height	mm	2.600	2.860	3.050	3.050
Weight	kg	4.850	6.550	13.000	14.100



Aluminum saw with maximum efficiency in pipes, profiles and solid materials.

The KASTOtec AM is specially developed for the economical and extremely rapid sawing of all common aluminum materials. The workpiece is precisely positioned by means of a spindle-driven material feed carriage and is machined at high speed. Particularly finely-balanced drive elements allow very high cutting speeds while running the tool gently and smoothly at the same time.

The specially developed band guides support the tool and forms a short chip that is easily disposable.

The controls are tailored to the particular task, and their easy-to-use surfaces support the particularly high efficiency of the KASTOtec, ensuring optimal use for every operator.

Individual, well-designed accessories make the machine an indispensable investment for every user.



Full program for full productivity.

Available accessories for the KASTOtec:

- Automatic material feed with the technology control systems KASTO *ProControl* and KASTO *ExpertControl*
- Clamping pressure reduction
- Minimum quantity lubrication system
- Extended material feed to 1,500 or 3,000 mm
- Heating package
- Cooling package
- KASTO double roller conveyor
- KASTO inclined magazine
- KASTO universal magazine
- KASTO section sorting system
- KASTO section marking system
- Connecting to KASTO sawing centers and KASTO low storage systems is easy to implement.

Many customized customer solutions on request.



The complete KASTO program: Saws. Storage. And More.

EXPERTISE RIGHT DOWN THE LINE.

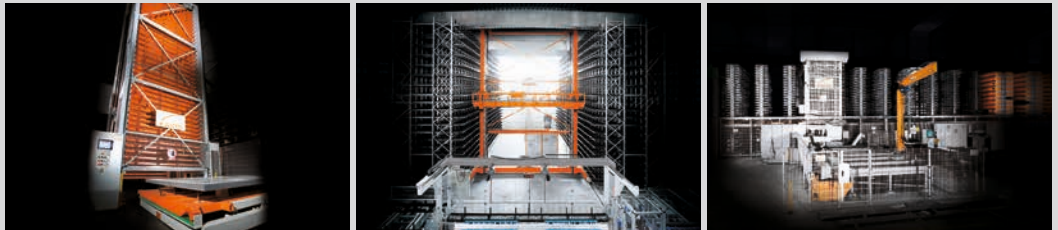
For more than 175 years, KASTO has been recognised for quality and innovation. Today, KASTO offers not only metal saws but also automatic storage systems for long goods and sheet metal, as well as customised material logistics solutions. The product portfolio is rounded off by innovative digital solutions and the powerful KASTO service. Thanks to ongoing development of new technologies and constant optimisation of machine concepts, KASTO has achieved the status of market leader in sawing and storage of metals.

KASTO'S SAWING MACHINES.



From the basic hacksaw to the high-performance automatic bandsaw capable of economically processing bar stock, blocks or plates of all grades, KASTO has the best solution for every challenge: Universal bandsaws and circular saws for light and medium applications, hacksaws employing the pushing-arching-cutting motion originated by KASTO, and production bandsaws and circular saws designed to cut medium to difficult materials. KASTOsort offers the possibility to palletise the complete variety of cut-off pieces of the KASTO sawing machine without additional operating effort – or to pass them to further processing systems.

KASTO'S STORAGE SYSTEMS.



Short provision time, optimum space utilisation and ideal stock overview: These are some of the benefits of KASTO storage systems from a standard tower storage to individually adapted bar and sheet metal storage system up to sophisticated material logistics and handling solutions such as the fully automatic sawing center KASTOcenter or the tour distribution system KASTOrail – KASTO plans and delivers the whole system including modern and flexible software solutions from one source.

KASTO'S MORE.



The extensive services of KASTO start already in the analysis and planning phase and do not stop with the commissioning and training. Maintenance concepts, service contracts, fast availability of spare parts or on-site maintenance and repair are just as much a part of this as individual remote support and advice via KASTO VisualAssistance or RemoteAssistance. KASTOretrofit adapts your machine or system to current requirements and re-enables it to be a powerful and reliable component of the production and logistics chain. And of course, KASTO service is available worldwide.

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