

# KASTO's entire program: Economic sawing and storing of metal.

Competence everywhere.

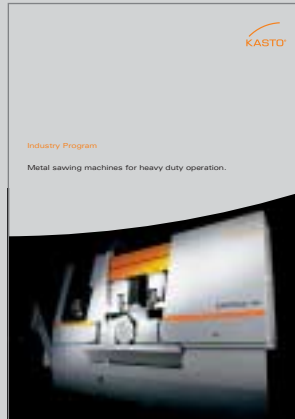
The KASTO program consists of: Circular saws and bandsaws for medium to heavy production cutting applications as well as storage technology for bar stock up to storage systems with integrated sawing centres, metal cutting band and circulars saws for light to medium use in workshops and production as well as hacksaws with the pushing arching cutting motions, invented by KASTO.



KASTO-Shop Program:

- Semi-Automatic Hacksaws for straight and mitre cuts
- Fully-Automatic, Semi-Automatic and Manual Circular Saws for straight and mitre cuts
- Fully Automatic and Semi-Automatic Bandsaws for straight and mitre cuts

Applications:  
Tradecraft, education/training, metalworking industry and steel service centres



KASTO-Industry Program:

- Production Bandsaws
- Large Production Bandsaws for cutting and handling of large workpieces
- Inclined Magazine Saws to cut large number of pieces
- Programmable Magazine Saws to cut medium batch sizes with fewer personnel

Applications:  
Metalworking industry, supplier industry, steel service centres and steel mills



KASTO-System Program:

- Fully Automatic Sawing Centres
- Fully Automatic Bar Storage Systems as cantilever or cassette storage systems
- Fully Automatic Commissioning Systems
- Combined Sawing and Storage Systems
- Inventory Control Computers

Applications:  
Metalworking industry, steel service centres and bar stock logistics



KASTO-Service Program:

- Maintenance concepts
- Service contracts
- Machine repair and machine overhaul
- Spare parts
- Information and help via phone
- Run-off and training
- On-site maintenance
- Hotline
- Teleservice

Your KASTO Partner

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KASTOtec. Production Bandsawing Machine for Medium and Heavy Production.



For lower cutting cost: Cutting performance and precision of highest standard.

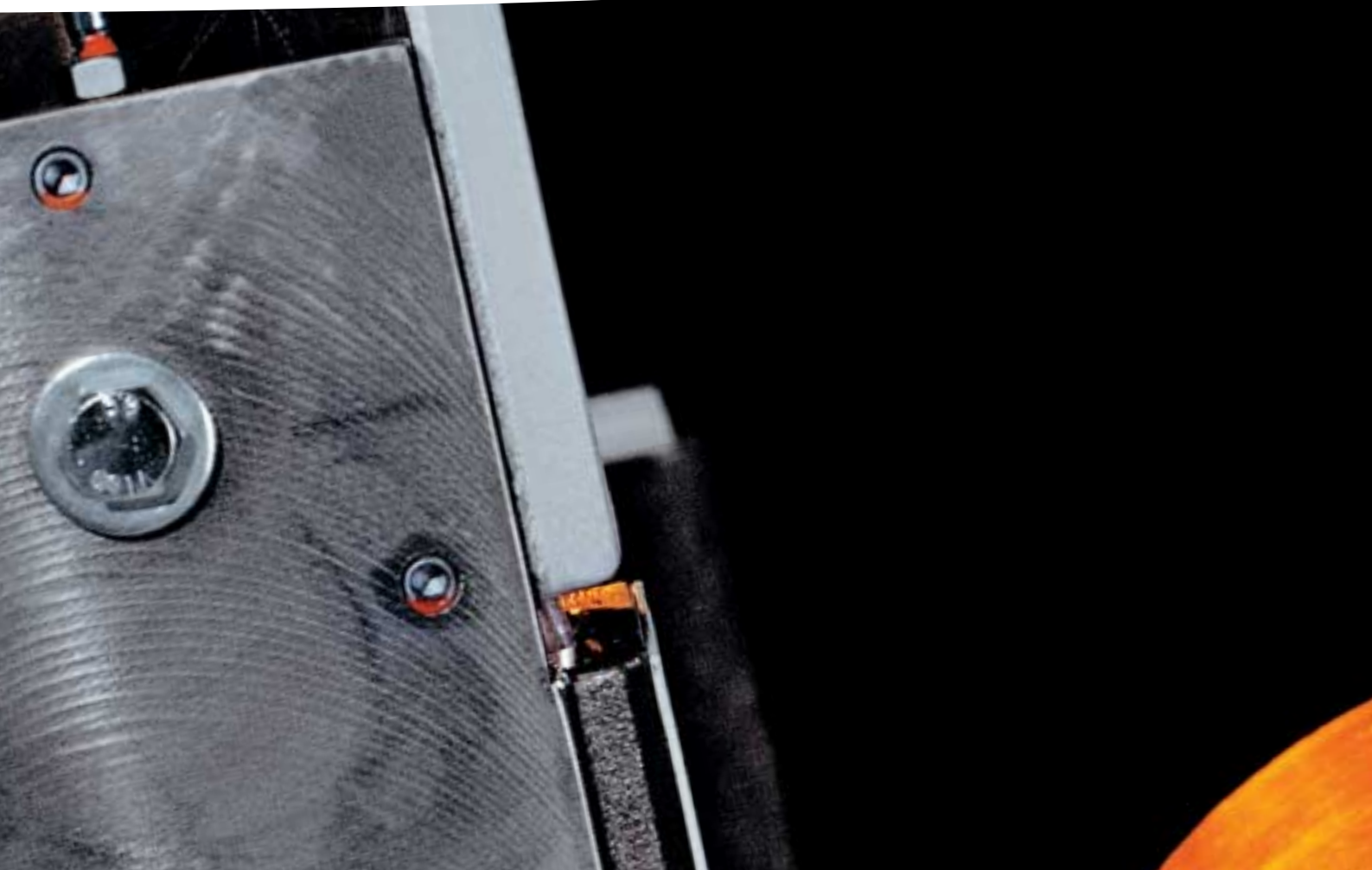
Rapid and universal:  
KASTOtec.

The open secret of profitable automatic saws: high cutting performance and short idle times. The horizontal bandsaw KASTOtec has been designed consistently for cutting of large work pieces, particularly solid bars as well as difficult to cut material qualities. Five sizes are available in fully automatic style KASTOtec A and in semi-automatic style KASTOtec U: from KASTOtec 3 with 330 x 430 mm up to KASTOtec 7 with 730 x 830 mm cutting range. Easy operation and well thought-out material handling are reducing idle times, thus creating the prerequisites for highest commercial efficiency.

KASTOtec: Precision and speed are cutting your costs!

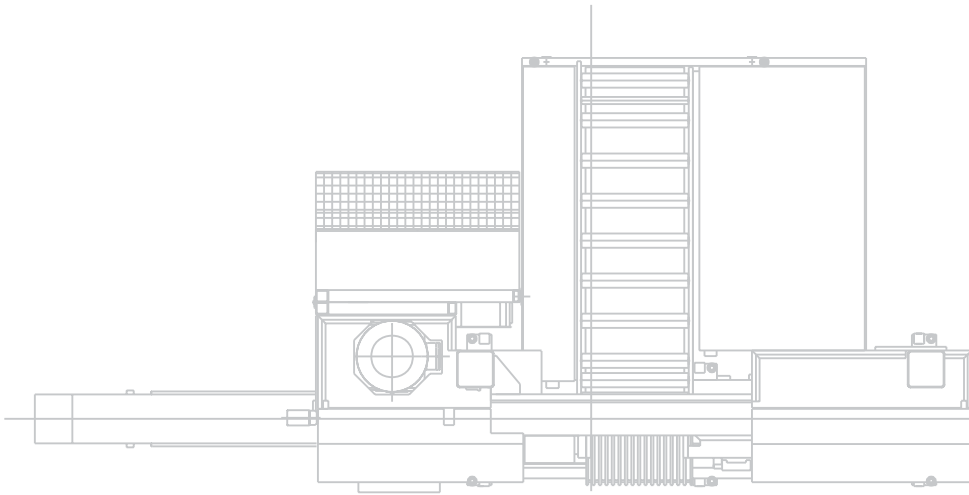
With the fully hydraulic KASTOtec in twin column design a cutting accuracy of  $\pm 0,1$  mm/100 mm cutting length can be reached – with cutting speeds up to 120 m/min, if carbide tipped blades are used even up to 180 m/min! Linear guides in vice and feed unit as well as a recirculating ball screw drive for the feed unit make this possible. High productivity is being complemented by a considerable improvement of utilization of material by a minimal rest piece length of 35 mm in automatic operation.

A composite structure of steel and polymer casting that is damping against vibrations makes high cutting performances possible with bi-metal or carbide tipped sawbands, the repetitive accuracy being impressive.



This is how a KASTOtec reduces nonproductive idle times:

- Adaptation to the customer's needs by modular system
- Rapid movement by means of large dimensioned hydraulics and linear guides in vice and material feed
- Automatic adjustment of blade guide arm
- Automatic setting to material height and width
- Automatic positioning for cutting without trim cut
- Intelligent regulation of cut for long blade life by KASTO Universal Hydraulics UH
- Incremental feed for short serial cuts



## High performance technologies for more profitability.

### Innovative and productive: Composite structure of steel and polymer casting.

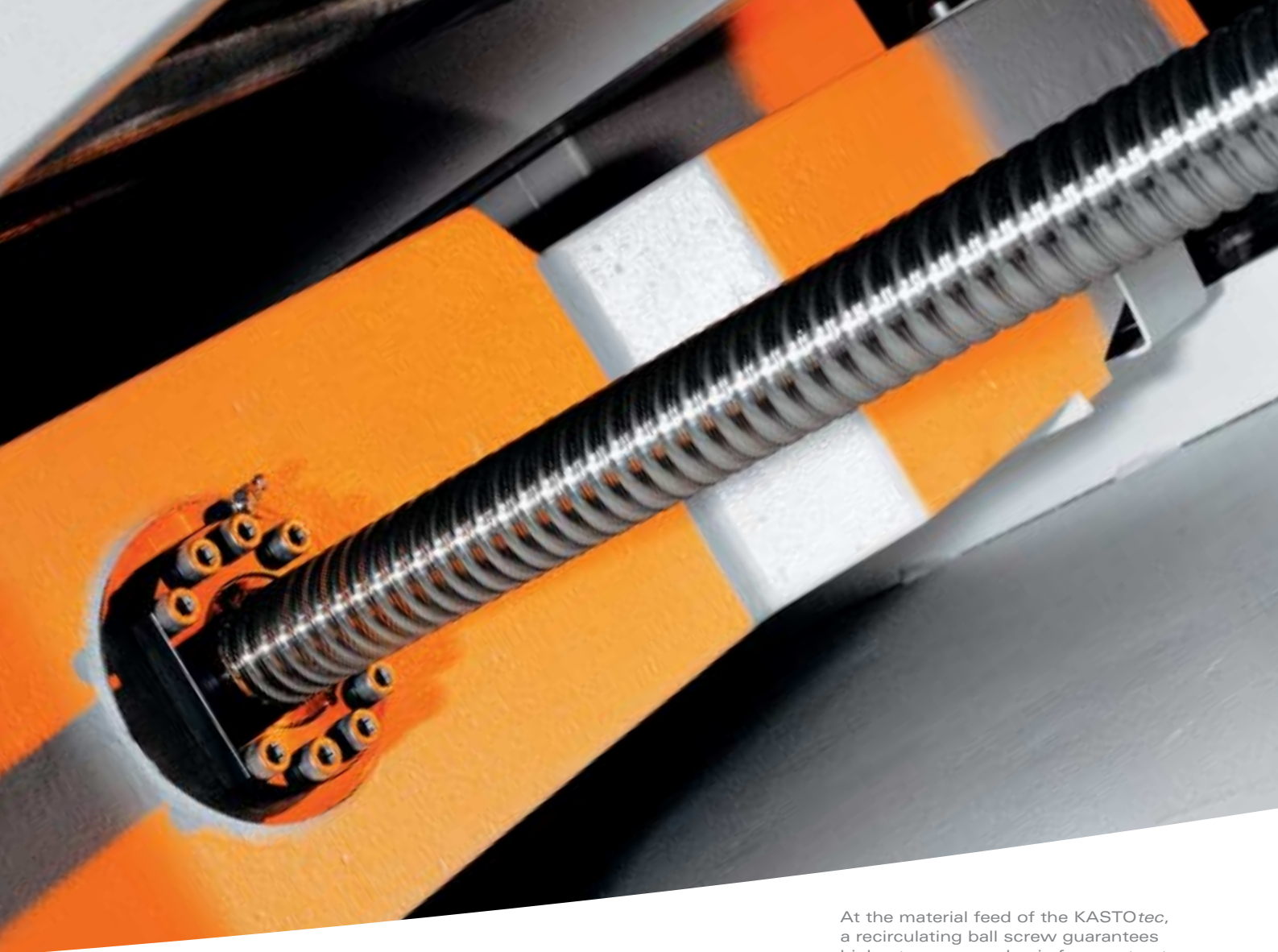
The steel casing of the saw head of KASTOtec filled with polymer casting offers a damping against vibrations that is approximately five times higher than usual casting structures. And the heavy construction of the remaining steel structure as well has only one goal: quiet running of the blade for high precision, constantly for the complete blade life, and highest reliability in all respects.

### Linear guide of saw unit and material feed.

The high rigidity of the KASTOtec's structure is complemented by the extremely exact guide of the saw unit. Square guide columns, a linear guide unit and two adjustable running rollers on a guide rail enable highest cutting precision. The consistent use of linear play-free guides minimized against friction as well as hydraulics adapted to the machine's cutting performance accelerate movements and peripheral functions of the automatic saw. Moreover, linear guides are convincing because they need little maintenance and are not subject to wear and tear.

Extremely precise with little maintenance:  
Stick-slip free working linear guides in saw  
head, material feed and vices of KASTOtec.





At the material feed of the KASTOtec, a recirculating ball screw guarantees highest accuracy – basis for exact cuts all along the line.

Mechanical engineering up-to-date: Material feed with recirculating ball screw.

KASTO is also demanding high standards of the material feed's accuracy. A first-class solution offering exact measures of cuts and an extremely good repetitive accuracy is the material feed drive via precise recirculating ball screw. In the long run this is the optimal solution with minimal maintenance charges.

Shorter cutting times: We do everything to reach this goal!

Even if much time can be saved by the reduction of idle times: shorter cutting times offer additional and obvious advantages. KASTO reaches these advantages not only by means of high rigidity and damping against vibrations of the KASTOtec but e.g. as well by means of an adapted saw feed: constant feed speed for solid material, infinitely variable up to constant cutting force for profiles.



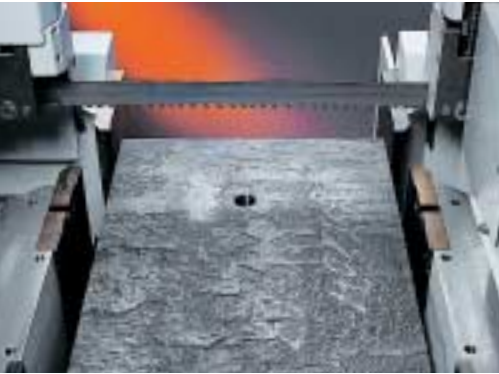
Mechanical engineering up-to-date: steel casing of KASTOtec's saw head filled with polymer casting.



Strong and sensitive: frequency regulated helical-bevel motor directly at the drive wheel with concentric bearings.



The continuous integrated machine roller conveyor simplifies material handling and transportation of short remnants.



Automatic clearance stroke of the firm vice jaw by approximately 10 mm during transport movement of material.



Rapid exchange of sawband directly from the front: ready in a few minutes thanks to easy access.



Rapid and safe for shorter idle times: automatic zero start.



Less scrap, more profit: minimal rest piece length 35 mm in automatic operation.



Well packaged and yet easy access: compact hydraulic unit.



The special chip conveyor is also suited for use of carbide tipped blades and for cutting of material producing long chips.

## Perfection ex works: The standard equipment of KASTOtec.

**KASTOtec:**  
Hightech is standard.

- Sawband guide via hydraulically pretensioned carbide slideways
- Electronic monitoring of the hydraulic blade tension
- Infinitely variable cutting speed, to be adjusted at central control panel
- Fully automatic, rapid height adjustment of the saw unit via light barrier
- Hydraulic horizontal vices, clearance stroke is standard
- Infinitely variable regulation of tension force, ideal for cutting of profiles and tubes (numerically controlled as option)
- KASTO Universal Hydraulics UH for continuous adjustment of feed speed and cutting force
- KASTO control for sawing machines *CompactControl*
- Vice for extremely short remnants



Good access from outfeed side and utilization of the entire clamping range without conversion.



Stable and precise carbide blade guides for highest cutting precision.



CompactControl, the KASTO control for sawing machines: Easy to operate and compatible with Siemens-S-5.

High availability:  
The „KASTO effect“.

The longer a production machine is reliably running the better. For this reason, KASTO is keeping maintenance times and maintenance charges at a minimum due to a high share of maintenance free elements. And by investing in a fine-tuned design KASTO makes sure that idle times are getting shorter and shorter. For instance with long blade lives by means of quiet running and large diameter band wheels with a precalculated distance to the blade guides. After cutting operation the blade tension is reduced to relieve the blade. In addition, blade speed is lowered after each cut.

excellent!  
Design Center Stuttgart  
1999

„Excellent“: The design of KASTOtec has been honoured by the Design Centre Stuttgart.



Safe, clean, quiet: complete guarding!  
Nevertheless: best access to infeed and outfeed side by slim saw unit.



### Automatization degrees for KASTOtec.

Individual peripheral equipments are available in connection with the optional machine control Posimod and an automatic loading of the bar into feed gripper to increase the degree of automatization:

- KASTO*tw*in roller conveyor
- KASTO inclined magazine
- KASTO universal magazine
- KASTO device for sorting of cut-off material
- KASTO device for marking of cut-off material

A connection to KASTO sawing centres and KASTO bar storage systems can be realized without problems.

# Complete program for total productivity.

These options are available for KASTOtec:

- Special bundle clamping device for the maximal cutting range
- Automatic loading of the bar into feed gripper with technology control Posimod
- Reduction of clamping pressure
- Mechanical limitation of opening
- Chip removal brushes
- Lubrication with minimal quantity of lubricant
- Special blade speeds
- Heating for control cabinet, heating for hydraulics, heating for coolant
- Surveillance package for blade and coolant
- Carbide package with contact free return of the sawband on both sides
- Longer material feed, 1.500 or 3.000 mm

Available for KASTOtec: Machine light, silhouette projecting light and laser light.

Higher efficiency by automatization adapted to the machine's use: Infeed and outfeed roller conveyors for 2.000 kg/m, 3.000 kg/m and 5.000 kg/m.



Always under control: Surveillance package with monitoring of blade deviation, of coolant flow and of minimal number of revolutions.



Dry cuts and chips, especially when cutting profiles: Lubrication with minimal quantity of lubricant.

For handling of several bars in layers or bundles: Bundle clamping device.

Inclined saw unit: Ideal for cutting of profiles, of forged square material or square material with many forging scales.



Maximal standard feed: 600 mm. Special feed lengths for 1.500 mm or 3.000 mm in one stroke available as option.

KASTO chip conveyor and movable chip container with drain cock for coolant.

Carbide package: Motor with 11/18 kW and contact free return of the sawband by retracting the bar and displacement of sawband.



## Hand in hand: Ergonomics and technology.

### Everything under control: The KASTO CompactControl.

Easy user guidance is a must! The KASTO *CompactControl* offers soft function keys with easy to understand symbols. All status messages and fault messages are displayed in plain text. All important operating data are memorized. With functions such as incremental feed, zero stop, automatic adaptation of the saw feed to the cutting width and a job memory for 30 data records of combinations of length/number of cut-off pieces the *CompactControl* contributes considerably to KASTOtec's productivity.

### Cutting at its best: KASTO Universal Hydraulics UH.

For adaptation to each cutting job the universal hydraulics of KASTOtec can be adjusted steplessly from constant feed speed to constant cutting force. Constant feed speed is recommendable for cutting of solid material, constant cutting force is recommended if profiles and tubes with their changing material cross sections are being cut.

The control for sawing machines KASTO *CompactControl* memorizes up to 30 data records and is convincing by operator convenience.



Technical data KASTOtec	A 3	A 4	A 5	A 5 x 10	A 7
Cutting range mm	330	430	530	530	730
Cut. range, for bundle cuts as well (H x W) mm	330 x 430	430 x 430	530 x 630	530 x 1.060	730 x 830
Material feed length, single stroke mm	600	600	600	750	750
Optional feed length, single stroke mm	1.500/3.000	1.500/3.000	1.500/3.000	3.000	3.000
Multiple feeding mm	9.999	9.999	9.999	9.999	9.999
Min. cut length mm	6	6	6	6	8
Min. diameter to be cut mm	10	10	10	20	20
Min. remnant length in autom. operation mm	35	35	35	35	50
Cutting speed, infinitely variable m/min	12-120	12-120	12-120	12-120	12-120
Saw motor, frequency controlled kW	5,5	5,5	5,5	5,5	11
Total power kW	9,5	9,5	9,5	9,5	20
Opt. carbide: saw motor, frequ. contr. kW	11	11/18	11/18	11/18	18
Opt. carbide: total power kW	17	17/24	17/24	17/24	30
Sawband dimension mm	6.830 x 41 x 1,3	6.830 x 41 x 1,3	7.675 x 54 x 1,3	8.555 x 54 x 1,6	9.195 x 67 x 1,6
Opt. sawband dimension mm	6.830 x 34 x 1,1	6.830 x 54 x 1,3	7.675 x 67 x 1,6	8.555 x 67 x 1,6	9.195 x 54 x 1,6
Opt. sawband dimension mm	–	–	–	–	9.195 x 80 x 1,6
Material support height mm	700	700	700	700	700
Overall dimensions: length mm	2.140	2.140	2.225	2.585	2.640
width incl. chip conveyor mm	4.610	4.610	5.215	5.290	5.040
height mm	2.310	2.410	2.680	2.400	2.865
weight kg	4.150	4.300	5.250	8.500	10.800

## Deciding service factor: The availability of the "Resource Saw".

Satisfied customers do not come by accident.

For KASTO, customer service is a corporate principle. KASTO views service as an integral part of a long-term partnership with the customer – for long lasting performance and reliability of KASTO products. Very often, problems can be solved by the operator after a telephone consultation. Spare parts are often shipped the same day. If necessary, courier or next-day air services are used. For competent on-site help, more than 25 specially trained service technicians with well equipped service cars are ready to go. In addition to the KASTO main factory in Achern, service technicians are also stationed in the KASTO facility in Schalkau, Thuringia, as well as in the Sales and Service Centre in Krefeld. This ensures that every location in Germany can be reached within a few hours. The sales partners abroad store a large variety of spare parts and have KASTO trained service technicians available.