

## Technical Data Sheet KASTOflex A

10/08

### Cutting range:

With saw blade diameter 450 mm

	Round	Flat (width x height)	Square (width x height)	
Cutting range 90°	Ø 150	200 x 100	140 x 140	mm
Cutting range 45°	Ø 145	160 x 80	120 x 120	mm
Cutting range 60°	Ø 115	120 x 60	100 x 100	mm

Minimum material height with flat material	8	mm
Remnant length in automatic cycle at 90°	35	mm
Remnant length in automatic cycle at 45°	95	mm

### Dimensions and weight:

Length approx.	3660	mm
Width approx.	1200	mm
Height approx.	1900	mm
Material support height approx.	1050	mm
Weight of machine approx.	2500	kg

### Performance characteristics:

Total connected load	6/8	kW
Connected load of coolant pump	0.1	kW
Pole changing saw drive	1.4/2.2	kW
Frequency regulated drive (option)	4.0	kW
Pole changing cutting speed	12/24	m/min
Infinitely variable cutting speed (option)	10 – 60	m/min
Direct entry of measures up to	9999	mm
Max. tolerance of straightness	12	mm/6 m
Material feed length, individual cut at 90°	2030	mm
Material feed length, individual cut at 45° approx.	1970	mm
Saw feed speed range	10 – 520	mm/min
Rapid return of the saw blade	2000	mm/min
Material feed speed	0 – 20	m/min
Max. clamping power of material feed vice	12500	N
Max. clamping power of vertical vice	25000	N
Reducible clamping power (option)		
Diameter of saw blade, special flange: option	Ø 350	mm
Reception boring according to DIN 8576	40/4 x 11/63	mm
Diameter of saw blade	Ø 400, Ø 450	mm
Reception boring according to DIN 8576 with intermediate ring	50/4 x 14/80	mm

<b>Coolant:</b>	Flow rate of coolant pump 40 l/min
<b>Mains voltage:</b>	In accordance with EN 60204 400 V three-phase current (-10 %, +6 %) Control voltage 24 V-DC The customer will be notified of the connection value in kVA after the scope of supply has been finalized. On request other voltages for an extra charge
<b>Mains frequency:</b>	50 Hz (-1 %, +1 %; transient -2 %, +2 %)
<b>Type of mains:</b>	TN mains according to IEC 364/VDE 0100 The power is supplied from the mains to the switching cabinets including advance fusing by the customer. The position of the switch cabinet is to be seen from the layout.
<b>Protective measures against indirect contact:</b>	Over-current protector (zero balancing). The mains supply of the operator (size and characteristic of the main fuse selected as well as the total impedance of PE and outer conductor in the supply line to the machine) has to be designed in such a way that the permissible shutdown time in the event of an error is not exceeded. The use of a differential current switch in the mains incoming supply is not permitted.
<b>Safety requirements:</b>	The offered machine corresponds with the valid safety requirements according to DIN EN ISO 12100-1, DIN EN ISO 12100-2
<b>Painting:</b>	Machine RAL 7035, light grey, structural painting
<b>Delivery terms:</b>	Possibly valid company's own operating material regulations have not been taken into consideration when working out the offer, unless they are specifically mentioned in the quotation. The machine will be equipped with proven components selected by KASTO. If you insist on the observance of your operating material regulations we kindly ask you to make these regulations available to us for working out the appropriate offer. After placing the order, any specifications can no longer be considered. This is also valid for so called fire protection regulations.

## Description of Machine

### Pos. 1000 KASTOflex A

Economical, universal, automatic circular saw for high performance demand in workshop and factory, for cutting of profiles, tubes and solids, automatically with 90° cuts and manually with mitre cuts on both sides.

### Machine Tool Table

Vibration damped steel construction, equipped with chip drawer, prepared for later mounting of a chip conveyor (option).  
Large safety door with safety lock for tool change.

### Saw Unit

Mounted below the rotating table, four-stage helical cylindrical gearing with hardened and ground toothed wheels, running in an oil bath. Direct drive via pole-changing three-phase motor.  
Infinitely variable cutting speed, frequency regulated (option).

### Rotating Table

Swivelling range 180°, manual angle adjustment by vernier scale.  
Fixed stops for 90° and 45° right/left, further stops on request.  
Easy rotational movement by means of four-point complete roller bearing.  
Plasma-nitride table surface, resistant to wear.

### Constant Saw Feed

Infinitely variable constant feed with hydraulic control.  
No change of saw blade (no set-up times) in mixed operation (profiles/solids).  
This reduces storing of different saw blades.  
Longer blade life by reason of constant chip removal when cutting profiles or solids.  
Electronic limitation of the upward cutting distance with "teach in".

### Workpiece Stop

Immobile and in ideal position with regard to the centre of motion of the saw blade. The stop plates don't need to be adjusted with cutting angle up to 60° on both sides.

## Material Clamping

Quick clamping of workpiece by key button with hydraulic long-/short stroke vertical vice. At the same time, a horizontally arranged hydraulic vice can be used (option).

## Device for Mounting of Saw Blade and Clamping of Saw Blade

KASTO standard flange with central fastening screw according to DIN standard device 50/80/4 x 14. By unscrewing the central screw the saw blade flange is pulled off at the same time. With this flange, saw blades with 400 mm and 425 mm Ø can be clamped. For saw blade diameter 350 mm an additional saw blade flange is necessary (option).

## Cleaning of the Saw Blade

By pin or roller chip removing wheel

## Removal of Chips

by chip drawer (standard) or chip conveyor (option)

## Material Feed

Guide via linear guide units with backlash-free guide carriages.  
Positioning via recirculating ball screw drive, direct numeric length measurement.  
Noncontact return stroke by vice lifting movement on both sides.  
Feed length in one stroke at 90° 2030 mm, at 45° 1970 mm.  
Remnant length with exchangeable clamping jaw in automatic cycle at 90° 35 mm,  
remnant length in automatic cycle at 45° 95 mm.  
Repeating accuracy of material feed  $\pm 0.1$  mm.

The cutting accuracy depends on the admissible cutting parameters and on the perfect condition of saw blades.

## KASTO Control for Sawing Machines *CompactControl*

- Executive sequencing PLC make Sütron (programmable in STEP 5)
- LCD with clear mask design
- Easy user guidance with soft keys and ten-key block
- Job memory for input of 98 combinations of length/number of pieces, input of original dimensions with multiple feed up to 9999 mm. It is possible to correct cut-off length and desired number of pieces of the jobs being processed.
- Display of actual and desired number of pieces
- Total number of pieces of the installation, piece counter can be reset
- Supervision and display in plain text of fault messages and status messages with date and time
- Information about status of all control inputs and outputs



- Adjustment of cutting speed and display
- Time registration for working time in automatic operation and working hours
- Change of language
- Change to inch system
- Input of system parameters without programming device

The KASTO control system allows fast, easy and reliable operation of machines.

## Scope of Supply

Control for sawing machines *CompactControl*

Standard cutting speeds 12/24 m/min

Pin chip remover

Solid steel saw blade Ø 400 x 4, 92 teeth

Integrated coolant tank with coolant pump

Flange for mounting of saw blade with integrated central fastening screw

Removable chip tub with sieve

Complete set of tools for saw blade change

1 instruction manual according to DIN EN ISO 12100, see delivery terms

## Description of Accessories for KASTOflex A

The prices of the available equipment only apply to delivery together with the corresponding machine. The prices for accessories that shall be retrofitted have to be inquired separately.

**Pos. 1300 Special voltage**

Price on request

**Pos. 1350 Special painting**

Special structural painting of complete machine  
Price and delivery period on request

### Complementary Equipment for the Control System

**Pos. 2210 Halogen machine lamp 24 Volt**

**Pos. 2216 Illumination for interior of machine tool table**

**Pos. 2280 NC rotating table**

Automatic positioning of mitre cut angle via NC table rotation axis. Easy input of the requested mitre cut position via numerical keyboard. Swivelling range of the table  $\pm 60$  degrees. Up to 98 different angles can be programmed variably. After the cut the saw table moves automatically to the next programmed mitre cut angle.

### Complementary Equipment for the Machine

**Pos. 3000 KASTO chip conveyor**

Ejection height 620 mm

**Pos. 3110 Hydraulic horizontal vice**

for additional material clamping on the left and/or right of the saw blade

**Pos. 3280 Frequency-regulated drive motor**

for infinitely variable cutting speed regulation from 10 to 60 m/min

**Pos. 3320 Flange for saw blade**

With 350 mm Ø (DIN standard device 40/63/4 x 11)

**Pos. 3370 Micro-spray lubrication system**

For coolants and lubricants with automatic monitoring. Recommended for cutting of tubes and profiles. The standard flood coolant device remains unchanged. Incl. 3 l spray coolant. Working pressure at least 5 bar. Waterless and dustless air supply by customer.

**Pos. 3372 Compressor to supply the machine with compressed air**

220 V, 50 Hz, motor power 1.3 kW, filling capacity 260 l/min, 8 bar, boiler contents 24 l

**Pos. 3391 Clamping power regulation**

by means of handwheel with with reading at pressure gauge

**Pos. 3971 Movable chip container with lifting truck**

With drop off plate as well as drain cock for coolant

**Complementary Equipment for Infeed and Outfeed Periphery**

**Pos. 4310 Roller conveyor joining**

For connecting the outfeed roller conveyor to the machine, right side. The mounting set for detached roller conveyor is necessary for infeed roller conveyor on the left side.

**Pos. 4320 Roller conveyor**

1060 mm long, equipped with 5 rollers Ø 50 mm, width of roller conveyor 470 mm, usable width 380 mm, distances between roller centres 2 x 152 mm and 2 x 304 mm, carrying capacity 250 kg/m

**Pos. 4321 Roller conveyor**

As Pos. 4320 but with 4 lateral guiding rollers

**Pos. 4322 Cover plates**

For roller conveyors Pos. 4320 and 4321

**Pos. 4323 Mounting set for detached roller conveyor**

1060 mm long, consisting of base and braces

**Pos. 4330 Roller conveyor**

2130 mm long, equipped with 8 rollers Ø 50 mm, width of roller conveyor 470 mm, usable width 380 mm, distances between roller centres 2 x 152 mm, 4 x 304 mm and 1 x 456 mm, carrying capacity 250 kg/m

**Pos. 4331 Roller conveyor**

As Pos. 4330 but with 8 lateral guiding rollers

**Pos. 4332 Cover plates**

For roller conveyors Pos. 4330 and 4331

**Pos. 4333 Mounting set for detached roller conveyor**

2130 mm long, consisting of base and braces

**Pos. 4346 Pre-loading rack**

Pre-loading depth 1000 mm, carrying capacity 350 kg

**Pos. 4910 Measuring system KASTOstop M 1**

Easy manually movable measuring stop on rollers, reading accuracy vernier 0.1 mm, incl. measuring rail with 1000 mm measuring length

**Pos. 4911 Elongation of the measuring length per 1000 mm**

**Pos. 4925 Digital measuring stop KASTOstop U 2**

Electronic measuring stop, manually movable by handwheel. Solid square steel guiding profile, cable guide in the insulating plastic tube. Pneumatic stop clamping. Return after every cut through pneumatic cylinder possible. Positioning accuracy  $\pm 0.1$  mm. Correction of actual value of measure display in case of operation with or without measuring tongue. Maximum stopping force 100 kg.

Measuring system complete with measuring range 2000 mm (length of measuring rail 2500 mm).

**Pos. 4926 Elongation of the measuring length per 1000 mm****Pos. 4940 Digital measuring stop KASTOstop A 2**

Electronic measuring stop with automatic positioning. Solid square steel guiding profile, cable guide in the insulating plastic tube. Pneumatic stop clamping. Return after every cut through pneumatic cylinder possible. Driving speed 0.4 m/s. Positioning accuracy  $\pm 0.1$  mm. Correction of actual value of measure display in case of operation with or without measuring tongue. Maximum stopping force 100 kg.

Measuring system complete with measuring range 2000 mm (length of measuring rail 2500 mm).

**Pos. 4941 Elongation of the measuring length per 1000 mm****Pos. 5000 Customized Accessories if Required****Consumables**

**Pos. 7010 Pin chip remover** for tooth pitch 11 – 12 mm

**Pos. 7011 Pin chip remover** for tooth pitch 12 – 13 mm

**Pos. 7012 Pin chip remover** for tooth pitch 14 – 15 mm

**Pos. 7013 Pin chip remover** for tooth pitch 15 – 16 mm

**Pos. 7020 Replacement steel jaw for vertical vice**

**Pos. 7100** KASTO cooling lubricant, 3 l, for Pos. 3370

**Pos. 7101** KASTO cooling lubricant, 10 l, for Pos. 3370

**Pos. 7102** KASTO cooling lubricant, 30 l, for Pos. 3370

**KASTO high-performance coolant concentrate (free from chlorine)**

**Pos. 7110** Water soluble, 5 kg

**Pos. 7111** Water soluble, 20 kg