

Technical Data Sheet KASTOflex U

10/08

Cutting range:

With saw blade diameter 450 mm

	Round	Flat (width x height)	Square (width x height)	
Cutting range 90°	Ø 150	350 x 25	140 x 140	mm
Cutting range 45°	Ø 145	280 x 30	120 x 120	mm
Cutting range 60°	Ø 140	170 x 50	110 x 110	mm

Minimum material height with flat material 10 mm

Dimensions and weight:

Length approx.	1795	mm
Width approx.	1400	mm
Height approx.	1900	mm
Material support height approx.	1050	mm
Weight of machine approx.	1350	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
Saw feed speed range	10 – 520	mm/min
Rapid return of the saw blade	2000	mm/min
Max. clamping power of vertical vice	23000	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

Coolant: Flow rate of coolant pump 40 l/min

- Mains voltage:** 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
- Mains frequency:** 50 Hz (-1 %, +1 %; transient -2 %, +2 %)
- Type of mains:** 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.
- Protective measures against indirect contact:** 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.
- Safety requirements:** The offered machine corresponds with the valid safety requirements according to DIN EN ISO 12100-1, DIN EN ISO 12100-2
- Painting:** Machine RAL 7035, light grey, structural painting
- Delivery terms:** 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 U

Universal, precise and fast, the semi-automatic circular saw for high performance demand in workshop and factory, for cutting of profiles, tubes and solids, both with 90° cuts and with mitre cuts on both sides.

Machine Tool Table

Robust weldment without distortion, chips are falling into chip container (chip conveyor = option), big access door for saw blade 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.

Eeasy rotational movement by means of four-point complete roller bearing.

Constant Saw Feed

Infinitely variable constant feed with hydraulic control

- no change of saw blade (no set-up times) in mixed operation (profiles/solids)
- reduced storing of different saw blades
- longer blade life by reason of constant chip removal when cutting profiles or solids

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 hydraulic horizontal 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. Additional saw blade flange for saw blades with 350 mm Ø (option).

Cleaning of the Saw Blade

By pin or chip removal brush

Removal of Chips

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

Scope of Supply

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 U

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 with *CompactControl*

Automatic positioning of mitre cut angle via NC table rotation axis. Easy input of the requested mitre cut position via numeral keyboard. Swivelling range of the table ± 60 degrees. Up to 98 different angles can be programmed continuously. After a cut, the saw table is automatically set to the following programmed mitre cut position.

- Executive sequencing PLC make Süttron (programmable in STEP 5)
- LCD with clear mask design
- Easy user guidance with soft keys and numeral keyboard
- 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 blade speed, only with frequency regulated drive, and display
- Time registration for working time in automatic operation and working hours
- Change of language
- Change cm/inch system
- Input of system parameters without programming device

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

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 Ø 350 mm

DIN standard device 40/63/4 x 11

Pos. 3370 Micro-spray lubrication system

for liquid cooling lubricants, with automatic monitoring. Recommended for cutting of tubes and profiles. The standard flood coolant device remains unchanged. Incl. 3 l cooling lubricant. 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 drain cock for coolant and drip plate

Complementary Equipment for Infeed and Outfeed Periphery

Pos. 4310 Roller conveyor joining

Right or left, to mount infeed and outfeed roller conveyors

Pos. 4320 Roller conveyor

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

Pos. 4321 Roller conveyor

As Pos. 4320, with 4 lateral guiding rollers

Pos. 4322 Cover plates

For roller conveyor 1060 mm long, Pos. 4320 and 4321

Pos. 4323 Mounting set for detached roller conveyor

1060 mm long, consisting of base and stays

Pos. 4330 Roller conveyor

2130 mm long, 8 rollers Ø 50 mm, with of roller conveyor 470 mm, usable width of rollers 380 mm, distances between roller centers 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, with 8 lateral guiding rollers

Pos. 4332 Cover plates

For roller conveyor 2130 mm long, Pos. 4330 and 4331

Pos. 4333 Mounting set for detached roller conveyor

2130 mm long, consisting of base and stays

Pos. 4346 Pre-loading stanchion

pre-loading depth 1000 mm, carrying capacity 350 kg

Pos. 4910 Measuring system KASTOstop M 1

Roller-guided, easily manually movable measuring stop, positioning accuracy with vernier scale 0.1 mm, measuring length 1000 mm

Pos. 4911 Elongation of measuring length per 1000 mm

Pos. 4925 Digital measuring system KASTOstop U 2

Electronic measuring stop, manual length positioning using handwheel. Stable square-steel guiding profile, cable routing in insulating plastic tube. Pneumatic stop clamping. Return after every cut is possible by pneumatic cylinder.

Positioning accuracy ± 0.1 mm.

Correction of actual value of measure display in case of operation with or without measuring tongue. Maximum stopping weight 100 kg.

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

Pos. 4926 Elongation of measuring length per 1000 mm

Pos. 4940 Digital measuring system KASTOstop A 2

Electronic measuring stop with automatic length positioning. Stable square-steel guiding profile, cable routing in insulating plastic tube. Pneumatic stop clamping. Return after every cut is possible by pneumatic cylinder. Driving speed 0.4 m/sec.

Positioning accuracy ± 0.1 mm.

Correction of actual value of measure display in case of operation with or without measuring tongue. Measuring system complete with measuring length 2000 mm (total length of measuring rail 2500 mm).

Pos. 4941 Elongation of 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. 7021** Replacement aluminium jaw for vertical vice

- Pos. 7101** KASTO cooling lubricant, 3 l, for Pos. 3370
- Pos. 7102** KASTO cooling lubricant, 10 l, for Pos. 3370
- Pos. 7103** 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