



KSC 710 Basic

CNC-controlled sharpening machine for CBN-abrasive grinding

- Fully automatic sharpening, re-toothing and chamfering of metal circular saw blades
- Fully automatic cutting in of chip breaker grooves on metal cutting circular saw blades
- Magazine with loading system can be connected at any time later on

KSC 710 Basic

High-Tech-Solution for re-sharpening, re-toothing and chamfering of HSS metal cutting circular saw blades.

The KSC 710 – BASIC is the ideal machine for the fully automatic complete processing of metal circular saw blades. In addition to a high degree of automation, the machine provides outstanding grinding quality as well as low grinding and secondary times.

This new machine is equipped with a powerful direct drive to the grinding wheel in order to prevent power loss and unwanted vibrations.

Solid carbide blades can be ground in addition to HSS and segmental circular saw blades. The saw blade data is entered into the control panel. The computer calculates tooth pitch, tooth height and for tooth shape C the tooth height difference according to DIN. The computer also calculates whether the grinding wheel thickness can be used or if the grinding wheel has to be changed.

After the input of face angle, back clearance angle and the chosen infeed the control determines the working speed as well as the necessary number of revolutions.

After pushing the start button the programmed saw blade diameter and the number of teeth are checked. If the entries are correct the machine automatically searches for the proper starting point of the grinding wheel and then starts grinding. If requested, automatic chamfering follows after grinding or re-cutting.

An additional hydraulic saw blade clamping at the grinding point guarantees absolute symmetrical chamfering even with a possible facing difference of the saw blade.

For the first time the "Complete System Thought" has been realized

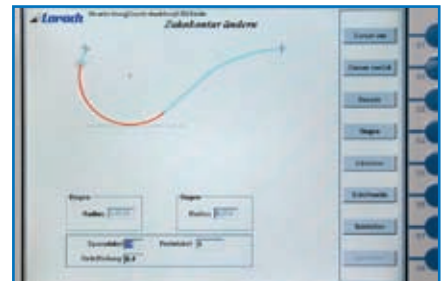
Not only a new machine has been developed but, in co-operation with their respective producers, also new grinding wheels and coolant have been matched in an optimized package.

Standard accessories integrated in basic machine

- ✎ Automatic saw blade diameter adjustment
- ✎ Automatic clamping device for a hydraulic clamping of the saw blade by means of pedal switch
- ✎ Automatic grinding wheel insertion
- ✎ Additional hydraulic clamping of the saw blade at the grinding point
- ✎ Fully automatic chamfering
- ✎ Direct drive to the grinding spindle
- ✎ Swivel input station with big LCD monitor and Windows operating system attached to the machine
- ✎ Effective coolant system with coolant pump of 10 bar and integrated 400 liter coolant tank with rough filtering system



Control



CAD-System



Carbide tipped saw blade ta



Pedal switch

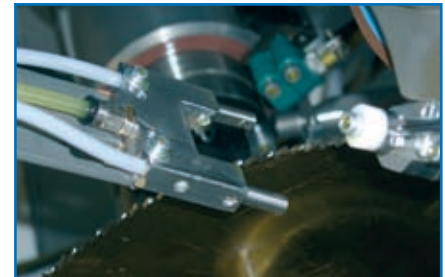
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Optional Accessories

- Integrated clamping flange handling
- Integrated modem for remote-diagnosis and maintenance as well as online-support
- Laser based automatic measurement system to determine the saw blade diameter, the number of teeth and thickness of the saw blades
- Fully automatic cutting in of chip breaker grooves
- CAD-program for the construction of special tooth shapes
- Variable pitch-grinding
- Control gear for grinding several saw blades to the same outside diameter

Advantages at a glance

- Absolute pitch accuracy
- Optimum surface quality due to CBN-abrasive grinding, direct drive of the grinding spindle and effective cooling of the grinding point
- Accurate chamfer, even for sawblades with a side run-out
- Machine available for water emulsion or oil
- By the use of the automatic path offset, different pitches can be machined using the same grinding wheel thickness
- Additional hydraulic clamping of the saw blades from 130 – 760 mm with only one clamping flange
- Clear menus with Windows operating system
- Automatic grinding wheel insertion with verification of the saw blade data
- Full automatic re-sharpening, re-toothing and chamfering
- Fully automatic cutting in of chip breaker grooves



Laser measurement system



Re-toothing



Chip breaker grooves device



Peripheral unit

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Technical Data

Working range

Saw blade diameter	Ø 40 – 760 mm
Autom. chamfering	Ø 130 – 760 mm (optionally from 100 mm possible)
Tooth pitch	1 – 55 mm
Number of teeth	2 – 998
Sawblade thickness	up to 8 mm

Grinding wheels

CBN-grinding wheel	Ø 200 mm
Bore size	Ø 32 mm

Cooling

Coolant pressure	10 bar
Coolant type	Water emulsion / Oil
Coolant quantity	400 l

Electrical installation

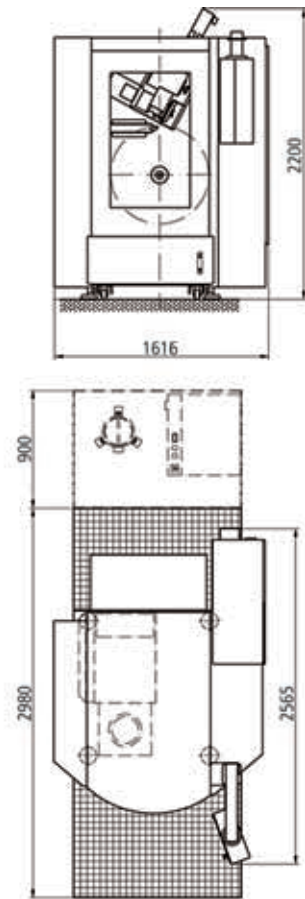
Power input grinding motor	3 kW
Power input machine	approx. 7.5 kW

Weight

approx. 2000 kg

Dimensions (W x D x H)

Without electro static air extractor	1616 x 2565 x 2200 mm
With electro static air extractor	1616 x 2565 x 2750 mm



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