

# **KHB 300**

# With common goals together on top

Tool grinding lies at the heart of the economic viability of modern grinding shops and Today's sawmills. Grinding shops and saw blade manufacturers expect reliability and the highest quality when undertaking saw blade maintenance.

Due to the high flexibility, our expert team is always in a position to meet with the current requirements. Customer focus is not only written, it is lived daily. With the philosophy "together on top" ISELI wants to realize common goals with the customers.



The system engineering of our products results in the highest functionality and ease of maintenance. Custom-tailored requirements are mostly realized. ISELI consistently relies on the latest technologies and long-life components – of course, the maintenance and repair costs are kept as low as possible. Quality that pays off!

To support a smooth work at our customers, we at ISELI offer an excellent after-sale service and can supply 95% of original spare-parts from stock.

# **Precision, economic** viability and innovation

ISELI is one of the leading providers in the processing of band, gang and circular saws. The ISELI team in Schötz produces all machines in Switzerland and guarantees a high technical know-how with experience for more than 70 vears.

#### **Technologies for band saws**



The worldwide largest selection for the processing of band saws. From automatic machines up to 6-axesdriven machines, ISELI leaves nothing to be desired.

#### **Technologies for circular saws**



ISELI sets new standards for carbidetipped circular saws with the world's first fully automatic circular saw sharpening machine, which does all grinding processes (face, back, chip breaker and flanks) in only one operation.

#### **Technologies for gang saws**



ISELI started a new trend with the gang saw machine type of GS4. Optimize your business processes with new services!

With annual innovations and developments ISELI pursues ambitious targets.

# **KHB300**

Sharpening machine with 7 CNC-controlled axes equipped with a measuring device for complete processing of rake and clearance angle of carbide tipped circular saw blades

Maximum precision and uncompromising quality





ISELI & CO. AG MASCHINENFABRIK

**SWITZERLAND** 

## **Specifications**

Tooth pitch

8 – 100 mm

Tooth height	up to 40 mm
Tooth shapes	programmable
Measuring device	built-in
Tooth geometries:	
Bevel grinding tooth back	0° – 45°
Front rake angle (Standard)	-12° up to +30°
Tooth height difference	0 – 1.0 mm
Chamfering	0 up to 45°
Grinding wheel:	
Outer diameter	200 – 250 mm
Bore diameter	32 mm
Grinding wheel compensation	built-in
Circular saws:	
	180 - 920 mm
Ø Saws (with Debat variant 1)	200 - 840 mm
Ø Saws (with Robot variant 1)	200 - 840 Milli 140 - 720 mm
Ø Saws (with Robot variant 2)	
Bore diameter	up to 6 mm
Ø Bore (without Robot)	22 – 210 mm
Ø Bore (with Robot)	30 – 180 mm
Power requirements:	
Standard Voltage	400 V 3 Ph. N
Connected load	6 kVA
Compressed air supply	6 bar
Weight:	
Weight: Net weight	approx. 2'340 kg

Subject to alteration in design for technical advancement.

Certificate ISO 9001

# **Sharpen circular saws using ISELI**

With major development investments in its circular saws product line, ISELI offers innovative, highly accurate and customer-oriented solutions in the diverse areas of wood, aluminium, plastic and metal applications.

ISELI deliberately relies on the highest quality and maximum operating comfort. The compact and rugged design ensures maximum grinding quality and precision.

With its new KHB, KMB and KMU product line, ISELI offers a varied product portfolio for a variety of applications.

processing of rake and clearance angle of carbide

tipped circular saw blades

KHB 200 Flexible sharpening machine with 7 CNC-controlled axes

universally usable for various processing steps on

circular saw blades

KHB 300 Sharpening machine with 7 CNC-controlled axes

equipped with a measuring device for complete processing of rake and clearance angle of carbide

tipped circular saw blades

(Preparation for connection to a KR robot system)

KMB 100 Sharpening machine with 6 CNC-controlled axes for

sharpening, re-toothing and chamfering of metal-cutting

circular saw blades

**KMB 200** Sharpening machine with 7 CNC-controlled axes suitable

for metal cutting circular saw blades usable for different

processing steps in the metal industry

KMB 300 Sharpening machine with 7 CNC-controlled axes equipped with a measuring device for complete

equipped with a measuring device for complete processing of rake and clearance angle for metal

cutting circular saw blades

(Preparation for connection to a KR robot system)

**KR400 / 500** Automatic loading system for circular saw blades with a 6-axis controlled industrial robot and 4 or 5 loading

carriages



ISELI collaborates with advanced technology partners to ensure that special customer requirements can be implemented quickly and easily.

#### **Patented Innovation**

With the world's first - patented - fully automatic circular saw sharpening machine of type KMU 100, which does all the grinding processes (face, back, chip breaker and flanks) in a single operation, ISELI sets new standards for carbide-tipped circular saws up to 1800 mm.

KMU100

Automatic grinding machine for face-, top-, chip breaker and flank grinding of carbide tipped circular saw blades

in one working step

The latest CE-regulations are completely observed. The electrical equipment corresponds with IEC-60204-1 standards.

### The most important points in brief

#### **SERIAL EQUIPMENT:**

measuring system.

7 CNC-controlled axes guarantee the complete processing of all common tooth geometries in only one cycle. Programmable via a 15 1-inch touch screen. The machine has been

mable via a 15.1-inch touch screen. The machine has been designed for use in manufacturing or sharpening rooms.

The basic machine is equipped with a CNC axis for height
adjustment, a radius follow'up and with a face angle adjustment. All this ensures maximum ease of use.

Grinding programmes: straight grinding, bevel grinding, tooth height difference, chamfering 45° and fully automatic

+ A sophisticated measuring system for automatic detection of the sawtooth is standard equipment.

Automatic scanning of the grinding wheel using an impact
+ sound sensor. Grinding wheel compensation integrated into

Capable of grinding all grinding surfaces with one single + programming. The same tooth can be ground in multiple

passes.

CNC-axes and engine room neatly apart from the grinding-

room. Optimal accessibility of the maintenance elements and the separation between the machine area and working area make service and maintenance quicker and easier.

#### **OPTIONAL EQUIPMENT:**

- The machine is available for the use of cooling emulsion or cooling oil incl. with CO2 fire protection system.
- Vario tooth device with built-in sensor on the feed pawl.

Integration with automatic loading system KR 400 / 500 featuring industrial robot for highly efficient automated

- sharpening of circular saw blades in production and service.
- Remote maintenance kit.
- Special customer requests will gladly be examined.

