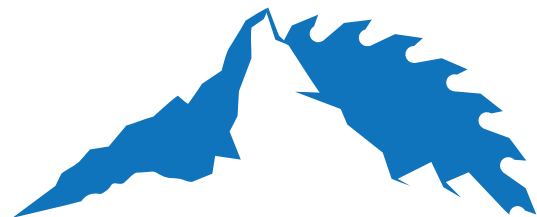


## ek 3

### 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 years.



#### Technologies for band saws

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



#### Technologies for circular saws

ISELI sets new standards for carbide-tipped 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 one only operation.



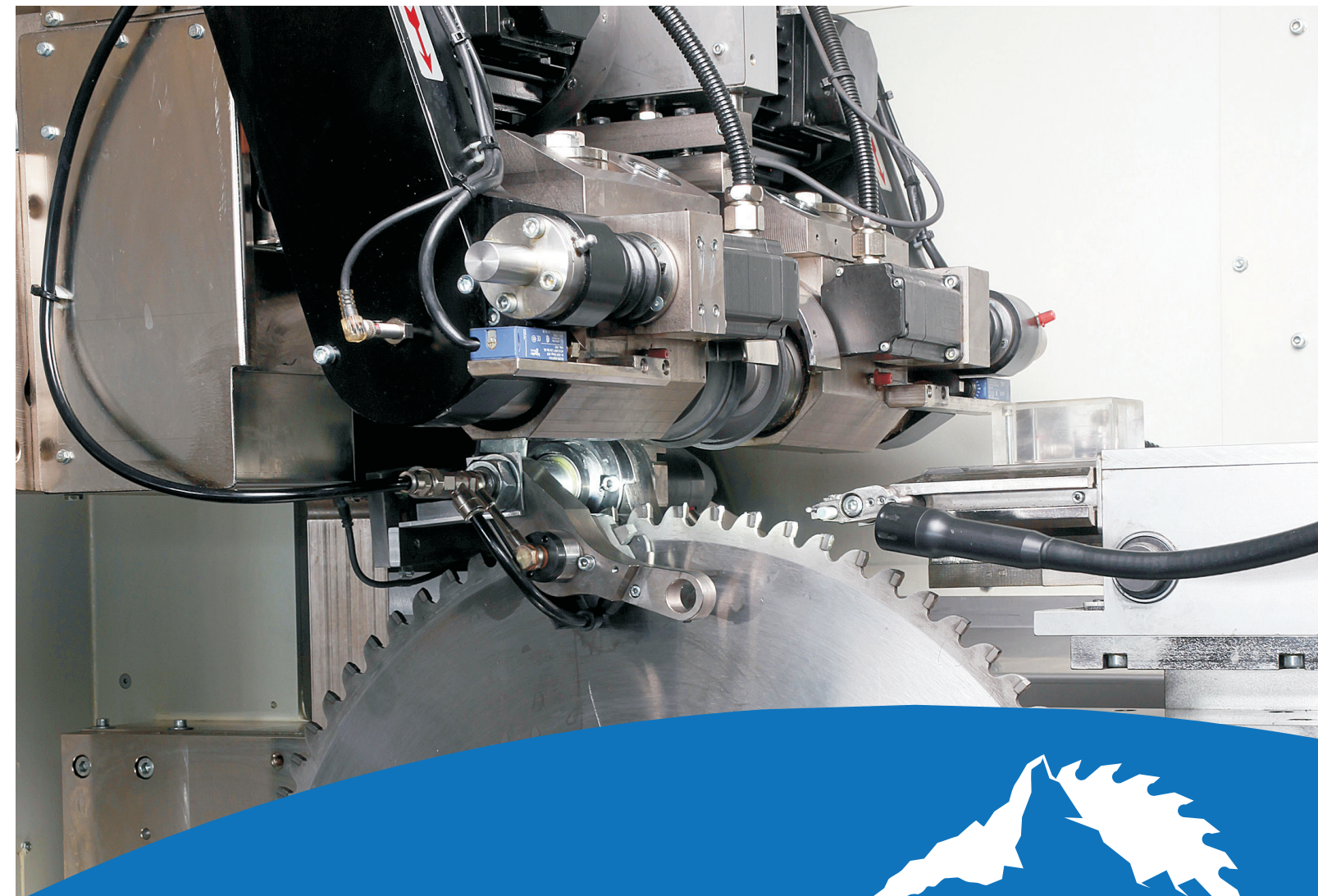
#### Technologies for gang saws

In 2012, 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.

## ek 3

Automatic side grinding machine for circular saw blades controlled with 5 CNC axes in wet grinding dual side-grinding with highest economic efficiency, most accuracy and smooth surface





## Specifications

### Basic information:

Tooth pitch	15 - 100 mm
Clearance angle Tooth face	0° - 7°
Clearance angle Tooth back	0° - 7°
Working speed	appr. 10 t / min **

### Grinding wheel:

Outer diameter (Variant 1)	Ø 75 – 100 mm
Outer diameter (Variant 2)	Ø 100 – 125 mm
Bore diameter	Ø 20 mm
Peripheral speed	programmable

### Circular saws:

Outer diameter	180 - 1'000 mm
Blade thickness	up to 8 mm

### Power requirements:

Standard Voltage	400V 3Ph N
Connected load	2.7 kVA
Grinding motors (2)	1.5 kW

### Shipping information:

Dimension of packing	240 x 160 x 190 cm
Net weight	1'850 kg
Gross weight	2'000 kg

\*\* Working speed is according to tooth shape, tooth pitch and feed system

Subject to alteration in design for technical advancement.

Certificate ISO 9001

## The purpose of the ek 3

The quality and efficiency are also influenced by how different needs and requirements can be solved with an investment.

Our side grinding of type ek 3 can be used in many ways - depending on the user's request. Some optional features:

- Special programmes for variable tooth widths, variable tooth pitches and grinding-wheel compensation. Input of compensation at the touch-screen of the machine.
- Automatic insertion of circular saw blade with removal from the blade clamping.
- CNC controlled axis for saw blade height adjustment. The saw blade diameter can be programmed and will be automatically positioned on call.
- Automatic tracing at the carbide tooth with vibration sensor (impact sound sensor).

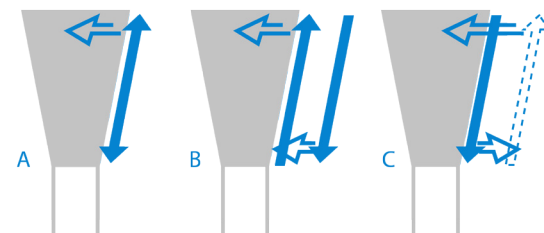


Operation and input of data can be done via our touch panel.

Our machine is convincing with short programming times and is very operator friendly.

## Possible grinding programmes

- A** Grinding-wheel feed is at the top. This process can be repeated several times
- B** Grinding-wheel feed is at the top and at the bottom what results in 2, 4 or 6 feeds
- C** Grinding-wheel feed is at the top. At the bottom, the grinding-wheel is moved back. The grinding head goes quickly upwards and the feed is again activated. This process can be repeated several times.



## The most important features

- **Our side grinding machine for circular saws is equipped with a 5 axes (standard) control unit. We offer a CNC technology allowing unlimited possibilities for sharpening the flanks of the saw tooth. CNC controlled axis for saw blade height adjustment.**
- Dual side-grinding with high economic efficiency. The advanced saw tooth can be finish ground several times in the same position
- Operation of the machine by use of a touch screen monitor. Conception and design of the machine are very operator friendly. That means short programming times, rapid familiarisation and flexible deployment of operating personnel at short notice.
- Special programmes for variable tooth widths, variable tooth pitches and grinding-wheel compensation. All inputs can be done via touch-screen.
- Optional automatic tracing at the carbide tooth with vibration sensor (impact sound sensor).
- The fully closed protection casing provides maximum safety for the operator, reduces noise drastically and makes the environment cleaner.
- Powerful water cooling with fully closed protection hood. Oil coolant is optionally available.
- CNC-axes and engine room neatly apart from the grinding-room. The optimal accessibility of the maintenance elements and the separation between the machine area and working area make service and maintenance quicker and easier
- Each action can be controlled individually by step motors what reduces idle running of the machine to a minimum.
- Auxiliary pneumatic clamping for stabilizing of thin saw teeth resulting in higher measuring accuracy. Very short adjusting operations because the tooth position remains the same for all types of saw blades.
- The application of CBN grinding-wheels for stellite-tipped circular saw blades or diamond grinding-wheels for carbide-tipped circular saw blades results in a high grinding accuracy and smooth surface.
- The latest CE-regulations are completely observed. The electrical equipment corresponds with IEC-60204-1 standards.