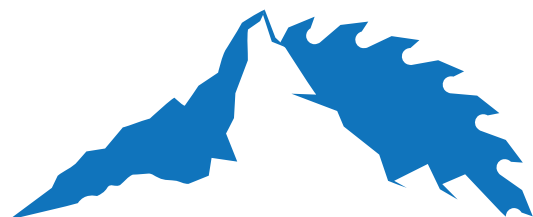


# bk 2

## 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.

# bk 2

Sharpening machine with 6 CNC-controlled axes of carbide and stellite tipped circular saw blades

more accurate and versatile than a Swiss army knife

**INNOVATION**





## Specifications

### Basic information:

Tooth pitch	8 – 100 mm
Tooth height	up to 40 mm
Tooth shapes	programmable

### Tooth geometries (Standard) :

Tooth face (Standard)	Straight
Bevel grinding tooth back	0° – 45°
Front rake angle (Standard)	- 12° – plus 30°
Tooth height difference	0 – 1.0 mm
Chamfering	45°

### Grinding wheel:

Outer diameter	200 – 250 mm
Bore diameter	32 mm

### Circular saws:

Outer diameter (Standard)	180 – 1'000 mm
Outer diameter (Universal)	180 - 920 mm
Blade thickness	bis 6 mm
Bore diameter	22 – 210 mm

### Power requirements:

Standard Voltage	400 V 3 Ph. N
Connected load	6 kVA

### Air supply:

Compressed air supply	6 bar
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### Shipping information:

Weight net	2'300 kg
Dimension of packing	240 x 200 x 230 cm

Subject to alteration in design for technical advancement.

Special executions on request.

Certificate ISO 9001

## more versatile than a Swiss army knife - our type bk 2

The machine concept of our universal grinding machine of type bk 2 has already solved many in grinding rooms.

The machines impresses by its multifunctional application and is suitable to wood processing as well as to metal processing. The bk 2 is available in 12 different variants:

### STANDARD (6 AXES)

#### TOOTH FACE:

- Straight grinding



#### TOOTH BACK:

- Straight grinding  
- Bevel grinding  
- Chamfering 45°  
- Tooth height difference



6 axes ensure maximum operator comfort. The CNC axis for height adjustment is of course included in the basic machine.

### ADDITIONAL S-AXIS (7 AXES)

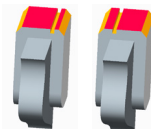
#### TOOTH FACE:

- Hollow-grinding of tooth face with heavy-duty spindle



#### TOOTH BACK:

- Groove grinding  
- Chip breaker

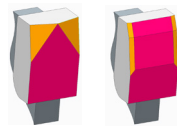


The additional CNC axis „S“ can be used for automatic saw blade positioning, groove grinding or hollow grinding

### ADDITIONAL F-AXIS (8 AXES)

#### TOOTH FACE:

- Bevel grinding



The additional CNC axis „F“ can be used for bevel grinding on the tooth face.

### UNIVERSAL

#### SHAPE:

- Tooth face + back  
- Tooth shape  
- Step reliever of tooth back grinding



**Corundum or bakelite wheel:** Shape grinding (dressing device)  
**CBN or diamond wheel:** Tooth back / tooth face

The optional tooth shape management program enables the operator to grind every conceivable tooth. ISEL is providing an outstanding range of solutions and accessories designed using our unique experience and know-how of engineering and software development.



## The most important features

- The machine is equipped with 6-axes (standard) control unit. The basic machine is equipped with a CNC axis for height adjustment and a radius follow'up
- Possibility of shape grinding. An optional dressing of corundum and bakelite grinding wheel for improved sharpening accuracy.
- The ISEL bk 2 is the ideal sharpener for:
  - Re-sharpening of circular saw blades.
  - Sharpening of newly tipped circular saw blades.
  - Shape grinding.
  - Step relieving of the tooth back edge of carbide-tipped circular saw blades.
- Our sharpening machine of type bk 2 meets all requirements for stellite-tipped and carbide-tipped circular saw blades. Of course with maximum grinding accuracy, quality and with a long lifetime.
- The machine works with water emulsion or with oil. Optional oil cooling system and CO2 fire safety unit.
- Depending on your wishes and requirements the machine can be extended up to 8 CNC axes.
- 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 care was taken for an easy and efficient handling.
- 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.
- The fully closed protection casing provides maximum safety for the operator, reduces noise drastically and makes the environment cleaner.
- The latest CE-regulations are completely observed. The electrical equipment corresponds with IEC-60204-1 standards.