



## ISELI – PRECISION FOR A PERFECT CUT

ISELI develops and manufactures grinding machines, complex processing machines and automation for a perfect saw shop at manufacturers of tools, service providers as well as for sawmills in the field of sharpening technology for band, gang and circular saw blades in the area of wood, aluminum, plastic and metal. Convince yourself of our expertise and experience for a perfect cut !

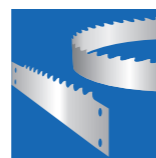
### Swiss quality by tradition

As a traditional family business, today already managed by the third generation, ISELI is developing sharpening machines with the latest technologies and excellent engineering – made in Switzerland.

ISELI system technology is convincing thanks to its maximum operating convenience, flexibility in the applications as well as to adaptation to customer requirements. Its outstanding quality makes ISELI sharpening machines a future-proof investment.

### Together ahead of the competition

As a customer, you benefit on one hand from our fair, partnership-based cooperation and on the other from our continuous development of the machining and sharpening processes. An additional advantage is the intelligent optimization in process and product handling.



Sharpening solutions for band and gang saws



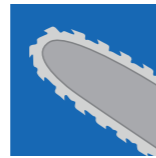
Sharpening solutions for circular saws



Sharpening solutions for hand tools



Sharpening solutions for industrial blades



Sharpening solutions for chain saws



Service

# BNP 100

## MACHINE FOR AUTOMATIC PROFILE SHARPENING OF BAND SAW BLADES CONTROLLED WITH 2 CNC AXES IN WET GRINDING

With an innovative operating concept, large grinding wheel diameter, servo drives and integrated remote maintenance access for maximum efficiency in grinding band saw blades.



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# SPECIFICATIONS

## BASIC INFORMATION:

Tooth pitch	10 - 100 mm
Tooth height	ab 30 mm
Front rake angle	0 - 35°
Tooth shapes	programmable
Weight	1450 kg

## BAND SAW BLADES:

Blade width (Standard)	75 - 360 mm
Blade width (Option)	30 - 360 mm
Blade length (Standard)	ab 5600 mm
Blade length (Option)	ab 4000 mm

## GRINDING WHEEL:

Grinding wheel Bakelit	Ø 350 mm
Grinding wheel CBN	Ø 300 mm
Bore diameter	Ø 32 mm
Peripheral speed	selectable

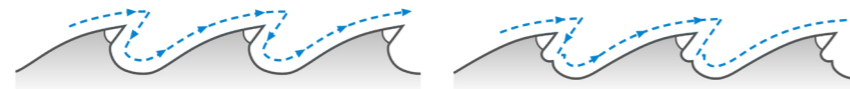
## POWER REQUIREMENTS:

Grinding motor	2,2 kW
Connected load	4.2 kVA
Compressed air supply	6 bar

Subject to alteration in design for technical advancement.

Certificate ISO 9001

# GRINDING PROGRAMS



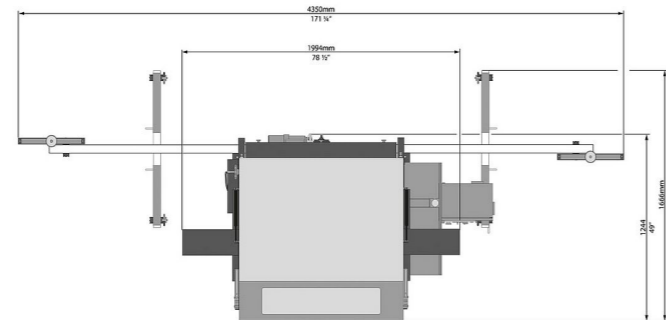
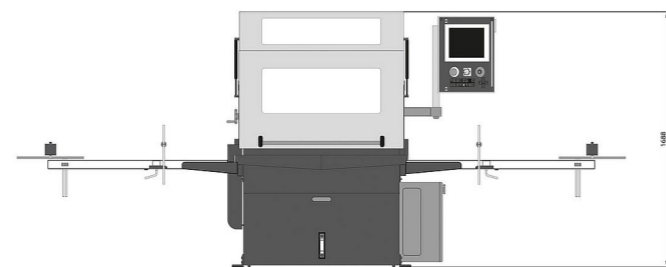
Grinding programme for standard toothing

Grinding programme for winter toothing



Grinding programme for vario toothing

# SPACE REQUIREMENTS



# OPTIONS

- CNC controlled dressing device
- Dust mist exhaust
- Oil cooling with fire protection and air purifier
- Lateral support, single stands, auxiliary back feed, loading unit
- Equipment for double toothed band saw blades
- Optical signaling device for process status recognition (signal lamp)
- Several grinding programs (Vario toothing, 4 grinding Speeds)
- Tooth shape construction program "Tooth Shape Studio 3.0"
- Remote maintenance

# HIGHLIGHTS

- High-quality, robust and state-of-the-art designed sharpening machine in wet grinding versions.
- BNP 100 standard equipment includes a powerful industrial computer, a touch system and servo drives.
- Remote maintenance and remote diagnosis are possible without any problems via LAN / WLAN connection.
- A controlled dressing device is optionally available for programming the grinding-wheel profile.
- With the tooth shape program (Tooth Shape Studio 3.0) individual tooth shapes can be programmed, stored, and transferred to the machine..
- Tooth shapes retrievable from the control unit (standard memory for 99'999 tooth shapes)
- Through the use of linear roller guides a stronger machine construction is achieved with increased service life and accuracy of the machine.
- The machining area is separated from the working space. Few moving parts also increase the ease of maintenance and the durability of the machine.
- 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.
- The grinding wheel peripheral speed can be adjusted. To this purpose a high-quality frequency converter is installed.
- Metric or imperial measurement system selectable (mm or Inch)
- In designing the machine great value was placed on simple and easy operation. This means short programming times and flexible deployment of operating personnel at short notice.
- The full cladding ensures the best possible protection for the operators. Noise is greatly reduced and safety increased.
- The grinding wheel diameter of 350 mm provides a great durability and shape retention.



### New HMI with touchscreen

ISEL I relies on the latest technology. The 12.1 inch touch screen offers maximum user comfort.

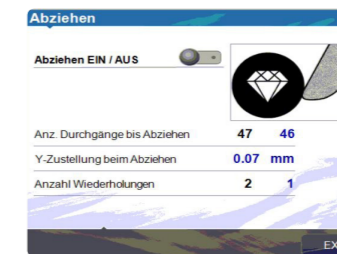
The integrated remote maintenance access and the active user management complement the functionality.



### Integrated foreign languages

The BNP100 is operated multilingually.

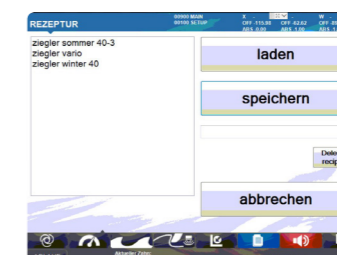
Nine language versions are included as standard.



### CNC dressing device

With the dressing device the entire grinding wheel profile can be profiled.

This ensures higher profile stability for the tooth shape and reduces grinding times considerably.



### Integrated recipe management

Tooth shapes can be saved as recipes and reloaded.

This significantly reduces set-up time. Ideal for service and / or production.



### Powerful mist extraction

The mechanical air filter serves to settle oil and emulsion mist.

The ISEL I air filter can freely control the suction volume and can be placed anywhere.