



BNF 100

AUTOMATIC SIDE GRINDING MACHINE FOR BAND SAW BLADES CONTROLLED WITH 4 CNC AXES IN **WET GRINDING**

Dual / oscillating side grinding for economical and perfect grinding results



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



ISELI + Co. AG Luzernerstrasse 31 CH-6247 Schötz

Web: www.iseli-swiss.com



SPECIFICATIONS

GENERAL INFORMATIONS:

Tooth pitch	13 - 100 mm
Clearance angle tooth face	0° - 7°
Clearance angle tooth back	0° - 7°
Tooth face angle	0° - 35 °
Working speed	approx. 10 t / min

GRINDING WHEELS:

Outer diameter (Variant 1)	Ø 75 – 100 mm
Outer diameter (Variant 2)	Ø 100 - 125 mm
Bore diameter	Ø 20 mm
Peripheral speed	programmable
Grinding motors (2)	1.5 kW

BAND SAW BLADES:

Blade length (Standard)	from 5'300 mm
Blade length (Option)	from 4'300 mm
Blade width (Standard)	75 – 360 mm
Blade width (Option)	30 – 360 mm

PROPERTIES:

Standard Voltage	400 V 3 Ph. N
Connected load	2,1 kVA
Compressed air supply	6 bar
Weight	approx. 1'600 kg
Coolant tank	170 I

GRINDING PROGRAMMES



A Grinding-wheel feed is at the top.

This process can be repeated several times

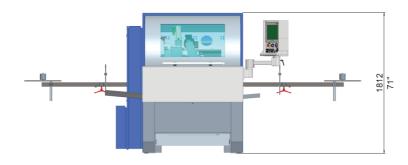


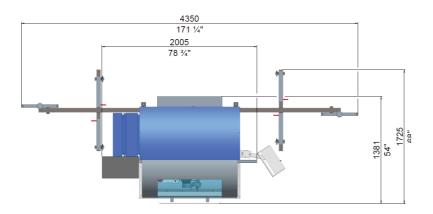
B Grinding-wheel feed is at the top and at the bottom what results in 2, 4 or 6 feeds



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.

SPACE REQUIREMENTS





OPTIONS

- Precision measuring device for angle regulation
- Dust mist exhaust
- Oil cooling euipment with fire protection and air purifier
- Equipment for double toothed band saw blades
- Equipment for mini-frame saws
- Loading unit
- Several grinding programs
 (Vario toothing, grinding wheel compensation)
- Remote maintenance
- Signal lamp

HIGHLIGHTS

- Our grinding machine gives you maximum grinding accuracy for your bandsaw blades, and a top-quality finish. The machine works with water emulsion or with oil. Optional oil cooling system and CO2 fire safety unit.
- The machine is equipped with a 4 axes (standard) control unit.
 We offer a CNC technology allowing unlimited possiblities for sharpening the flanks of the saw tooth. Dual side-grinding with high economic efficiency.
- Remote maintenance and remote diagnosis are possible without any problems via LAN / WLAN connection.
- 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.
- The application of CBN grinding-wheels for stellite-tipped circular saw blades or diamond grinding-wheels for carbidetipped circular saw blades results in a high grinding accuracy and smooth surface.
- Tooth shapes retrievable from the control unit (standard memory for 99'999 tooth shapes).

- Built-in adjustment by electric motor.
- Wet grinding technique (emulsion and oil cooling) with CBN diamond grinding wheels. Minimum wear of grinding wheels and much reduced grinding times.
- This machine is also highly suitable for grinding thin-cutting and mini gang saw blades. Our auxiliary pneumatic saw blade clamping for stabilization of thin teeth during grinding, resulting in higher dimensional accuracy.
- Very short adjusting operations because the tooth positions remains the same for all types of saw blades.
- Adjustment of grinding wheel peripheral speed can be adjusted by frequency converter.
- The use of proven components and aggregates as well as inprocess quality control are the basis for operational safety, optimum work results and durability.
- Metric or imperial measurement system selectable (mm or lnch)



NEW HMI WITH TOUCHSCREEN

ISELI 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.



POWERFUL MIST EXTRACTION

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

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

