



## 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



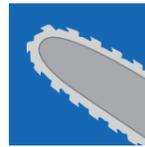
Sharpening solutions for circular saws



Sharpening solutions for hand tools



Sharpening solutions for industrial blades



Sharpening solutions for chain saws



Service



# BNP 200 / 210

## MACHINE FOR AUTOMATIC PROFILE SHARPENING OF BAND SAW BLADES CONTROLLED WITH 3 CNC AXES IN WET GRINDING

The 3rd axis allows separate sharpening of tooth face and tooth back. Optionally, the zero points can be set automatically with the sound sensor.



# SPECIFICATIONS

## BASIC INFORMATION BNP200 / 210:

|                  |              |
|------------------|--------------|
| Tooth pitch      | 10 - 100 mm  |
| Tooth height     | bis 30 mm    |
| Front rake angle | 0 - 35°      |
| Tooth Shapes     | programmable |

## BAND SAW BLADES BNP200 / 210:

|                         |              |
|-------------------------|--------------|
| Blade width (Standard)  | 75 - 360 mm  |
| Blade width (Optional): | 30 - 360 mm  |
| Blade length (Standard) | from 5300 mm |

## GRINDING WHEEL / POWER BNP200:

|                        |                |
|------------------------|----------------|
| Grinding wheel Bakelit | Ø 350 mm       |
| Grinding wheel CBN     | Ø 300 / 350 mm |
| Bore diameter BNP210   | Ø 32 mm        |
| Peripheral speed       | selectable     |
| Grinding motor         | 2,2 kW         |
| Elektrischer Anschluss | 400V 3Ph N     |
| Connected load         | 3.6 kVA        |
| Compressed air supply  | 6 bar          |

## GRINDING WHEEL / POWER BNP210:

|                        |            |
|------------------------|------------|
| Grinding wheel Bakelit | Ø 400 mm   |
| Grinding wheel CBN     | Ø 300 mm   |
| Bore diameter          | Ø 127 mm   |
| Peripheral speed       | selectable |
| Grinding motor         | 9.0 kW     |
| Connected load         | 12.0 kVA   |
| Compressed air supply  | 6 bar      |

## NEW TOOTHING BNP210:

|                 |             |
|-----------------|-------------|
| Tooth pitch     | 15 - 50 mm  |
| Tooth height    | 5 - 30 mm   |
| Blade thickness | max. 1.5 mm |

# GRINDING PROGRAMS



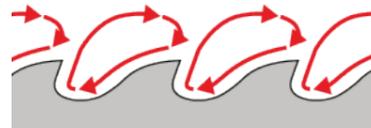
Grinding programme for standard and vario tootthing



Grinding programme for tooth face and tooth back



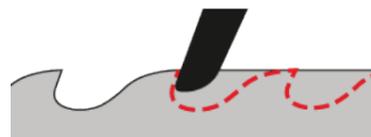
Grinding programme for winter tootthing



Grinding programme for several passages

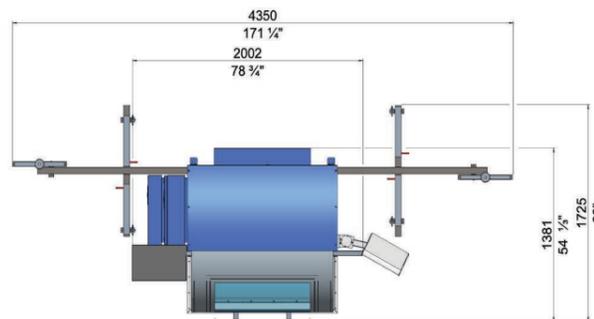
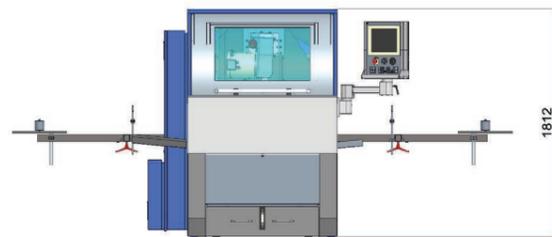


Automatic tracing at the tooth with vibration sensor (impact sound sensor)



Deep Grinding / New Tootthing

# SPACE REQUIREMENTS



# OPTIONS

- CNC controlled dressing device
- Automatic tracing at the tooth with vibration sensor (impact sound sensor)
- 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 tootthing, 4 grinding speeds, finisher tooth or top / face)
- Tooth shape construction program "Tooth Shape Studio 3.0"
- Remote maintenance

# HIGHLIGHTS

- The 3rd axis allows separate sharpening of tooth face and tooth back, improved technology particularly for stellite-tipped and carbide-tipped band saw blades.
- On the BNP210, the grinding-wheel is driven directly by a revolutionary water-cooled spindle motor (electric load up to 8 KW). High accuracy and performance!
- Excellent surface finish when using CBN grinding-wheels as well as bakelite grinding-wheels for wet grinding. The BNP200 is equipped with a large bakelite grinding-wheel of 350 mm in diameter.
- Profile and top/face grinding for standard and stellite- and carbide-tipped band saw blades.
- Tooth shape grinding via X+Y CNC axis (several circle passes of the band saw blade).
- Tooth shape grinding via W+Y CNC axis (finish-grinding of the fix-clamped tooth or top/face grinding).
- Electrically controlled central height adjustment for saw blades.
- Electrically controlled cutting angle regulation.
- 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.
- Tooth shapes retrievable from the control unit (standard memory for 99'999 tooth shapes) .
- Metric or imperial measurement system selectable (mm or Inch).
- Powerful water cooling system with fully enclosed protection hood.
- Driven by servo motors.
- Use of linear roller guides for all CNC axes (stiffer engineering and significantly increased lifetime).
- CNC-axes and engine room neatly apart from the grinding-room. The accessibility of the maintenance elements and the separation between the machine area and working area make service and maintenance quicker and easier.



## NEW HMI WITH TOUCHSCREEN

ISELL 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.



## AUTOMATIC PROBING

The zero point of the tool can be determined automatically by probing the grinding wheels on the sawtooth.

The application is carried out with a sound sensor.

