



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



STA

FULLY AUTOMATIC HYDRAULIC CONTROLLED SWAGING MACHINE FOR BAND SAW BLADES

Swaging twice - Shaping once



SPECIFICATIONS

BASIC INFORMATION:

Tooth pitch	18 - 76 mm
Tooth height	from 10 mm
Clearance angle	5° - 28°
Front rake angle	5° - 35°
Working speed	**approx. 8 t / min

BAND SAW BLADES:

Blade length	from 5'300 mm
Blade width (Standard)	80 - 360 mm
Blade width (Option)	from 50 mm

GANG SAW BLADES:

Toothing length	up to 1'500 mm
Blade width	75 - 180 mm

POWER REQUIREMENTS:

Standard Voltage	400V 3Ph N
Connection power	approx. 2.0 kVA

AIR SUPPLY:

Compressed air supply	6 bar
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SWAGING AND SHAPING BANDSAWS

Swaging saw teeth is another possibility, along with setting, for ensuring that the bandsaw can cut freely during machining. For the swaging process, a swaging bolt is placed in front of the saw tooth. The saw tooth is held in place with an anvil.

By turning the eccentric swaging bolt, the sawing material is pushed towards the tooth tip. When the swaging process has ended, the swaging bolt turns back to its starting position.

Leveling takes place after swaging, i.e. the material which was pushed towards the tooth flanks is pressed together with the appropriate equalizing jaws, so that the tooth tip is conically tapered downwards and backwards. As the swaged saw tooth works on the entire kerf width, it carries out the same work which would be carried out by two teeth on a set saw. The cutting power is increased thanks to the greater number of main and minor cutting edges. In addition, the hardness grade of the base material is increased thanks to the swaging process.



SWAGED TOOTH



SWAGED TOOTH SHAPED



SWAGED TOOTH GRINDED

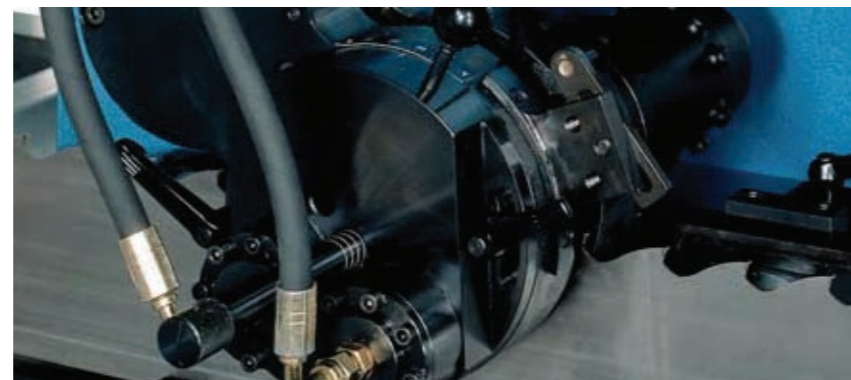
SWAGING PROCESS

The hydraulically controlled swaging and shaping machine for band and gang saw is a great relief in grinding rooms.



A centralized height adjustment of the saw blade and feed limit stop for variable tooth pitch is integrated in the basic machine. The robust design of the machine guarantees an extremely long lifetime coupled with high precision and low maintenance. The machine is very easy to operate: the same tooth can be swaged once or twice and shaped in a single pass. The blade feed is effected by the swage bar so that accurate positioning of the saw tooth is guaranteed.

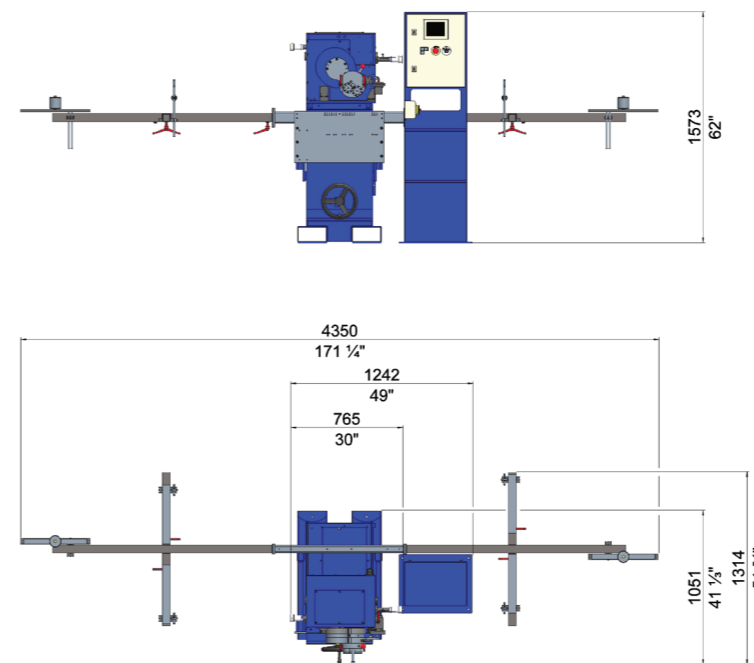
It can be used on 10 different positions. Our innovative grinding solutions prolongs the tool life of your saw blades and boosts the productivity of your grinding room.



HIGHLIGHTS

- Our swaging machine of type STA has a robust steel design. The machine is hydraulically controlled and equipped for band saws.
- Swaging densifies the tooth point of the saw tooth of what results a smoother and more accurate cut of the wood and a higher production.
- The same tooth can be swaged once or twice and shaped in a single pass.
- Suitable to swage and shape band saw blades up to 360 mm of width of all common dimensions (maximum 3.0 mm thickness).
- The use of proven components and aggregates as well as in-process quality control are the base for operational safety, optimum work results and durability.
- The die is mounted in bearings on both sides. It can be used on 10 different positions.
- Easy to operate due to the latest state of technology with a SPS control unit. The control-panel is well arranged and accessible.
- The blade feed is effected by the swage die so that accurate positioning of the saw tooth is guaranteed.
- The clearance- and the rake angle, the width to be shaped and the tooth pitch are easily set according to scales, without changing any machinery parts.
- Integrated centralized height adjustment of the saw blade and feed limit stop for variable tooth pitch.
- The latest CE-regulations are completely observed. The electrical equipment corresponds with IEC-60204-1 standards.

SPACE REQUIREMENTS



OPTIONS

- Equipment for variable toothing
- Automatic lubricating unit (dropwise)
- Equipment for double toothed band saw blades
- Loading unit

ADDITIONAL EQUIPMENTS

- Shaping fences for clearance angles 5° or 8° (on choice).
- Swage dies 10, 12 or 14 mm (on choice).