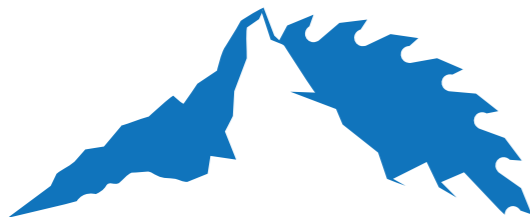


LU1

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.

LU1

Automatic grinding machine for face-, top-, chip breaker and flank grinding of carbide tipped circular saw blades in one working step

Now it is possible to grind saw blades up to 1800 mm diameter with highest accuracy in only one setting at one machine.

WORLD NOVELTY



Specifications

Processing data:

Tooth pitch	10 – 150 mm
Tooth height	6 – 30 mm
Front rake angle	-20° up to +35°
Chip breaker facility	0 - 10°

Grinding wheels:

Tooth face / tooth back	200 mm
Side grinding	100 / 125 mm
Chip breaker	100 / 125 mm
Peripheral speed	programmable

Circular saws:

Outer diameter	300 - 1'800 mm
Bore diameter	100 mm

Power requirements:

1 Grinding motor	1.1 kW
Coolant pump	1.1 kW
Electrostatic exhaust	0.40 kW
Grinding mist exhaust	0.75 kW

Compressed Air:

Air supply	6 bar
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Machine dimensions:

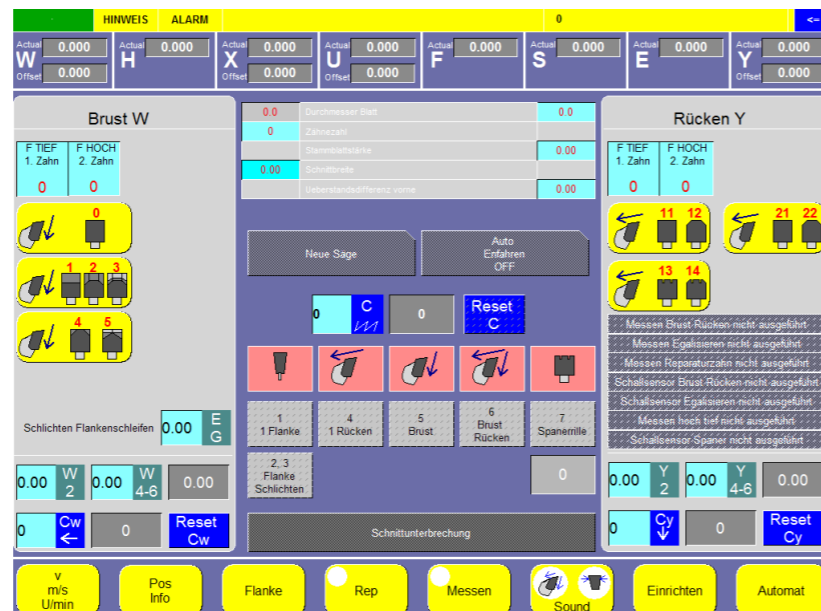
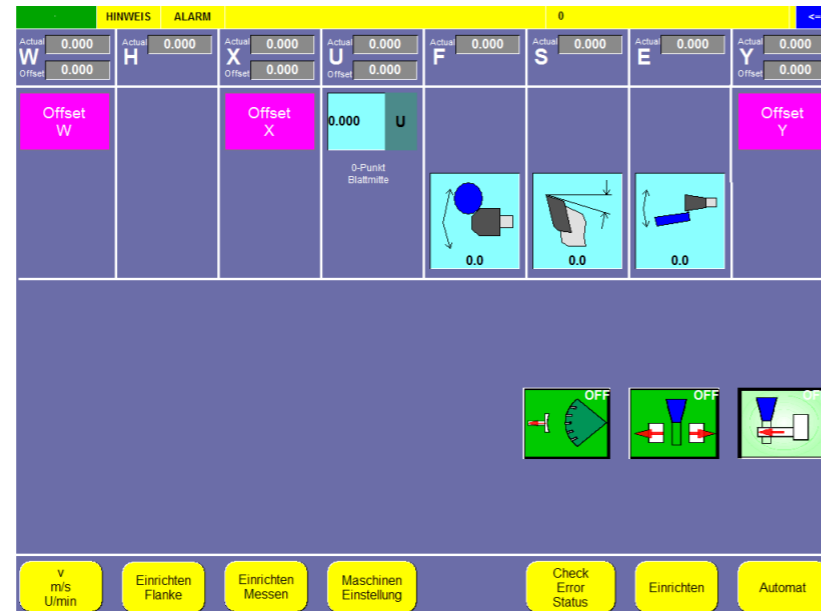
Weight of the machine	approx. 4'300 kg
Height (total)	2'950 mm
Length (total)	5'100 mm

Subject to alteration in design for technical advancement.

Special executions on request.

Certificate ISO 9001

Machine operation / procedure

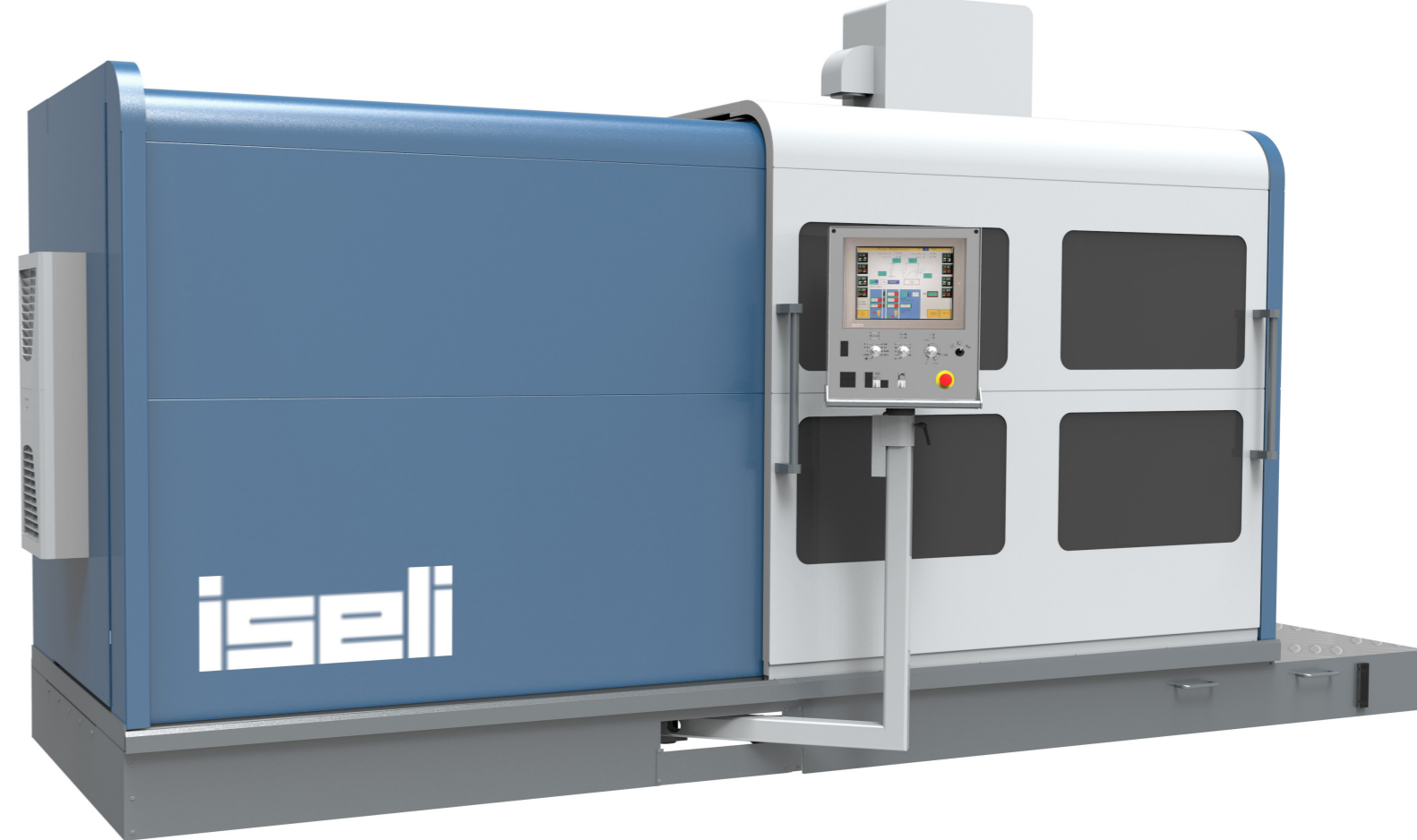


Control unit is on the front side of the machine, the arm can be pivoted and the front control panel can be rotated by 300°. Front control panel can be clamped by means of grip. This prevents unwanted rotation by pressing the touch panel.

Operation of the machine by use of a touch screen monitor coupled with an industrial computer. 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.

Entry of the machine parameters such as grinding speed, automatic operation, offset values, number of teeth, program sequence, etc. can be done by touch panel. All the function buttons and rotary selector switches are for the machine axis, and to start the programmes.

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 most important features

- Our newly developed profile grinding machine of type LU 1 gives you maximum grinding accuracy for your circular saw blades and a top-quality finish.
- The complete process can be programmed via the 9-axes CNC control. We offer a CNC technology allowing flexible and precise adaptation to different tooth shapes and geometries. The advanced tooth can be ground completely in one or more passages.
- Linear grinding motion, resulting in a very high accuracy of grinding
- Automatic grinding machine for face-, top-, chip breaker and flank grinding of carbide tipped circular saw blades in one working step.
- It is possible to grind saw blades up to 1800 mm diameter with highest accuracy in only one setting at one machine.
- The entire working unit of the machine is located in a closed casing. This casing works in multiple ways: The machine operates with reduced noise. Additionally it protects the operating personnel against the emissions (grinding dust and coolant mist) that are created during sharpening and prevents injuries that may be caused by moving or running parts of the machine.
- Special operator convenience through automatic measurement of teeth, positioning of grinding discs, automatic perception of saw blade diameter, automatic detection of damaged teeth and automatic grinding-wheel compensation with vibration sensor.
- Inclusive a grinding program for chip breaker, grinding of grooves and grinding of several face areas.
- The grinding machine of type LU1 is 2 channel monitored and it is set up in 2 - manual operation, it prevents unwanted touching of moving parts.
- The loading of circular saws can be done by a crane from above.
- Mechanism and grinding head guides with tempered shafts and ball bush bearings (minimum maintenance, no greasing points).
- The drives are equipped with servo motors. Powerful components and grinding motors.
- Grinding mist extraction system with integrated refrigerant recovery. The equipment for oil processing including CO2 fire protection system and oil mist system is optional available.
- Adjustment of grinding wheel peripheral speed can be adjusted by frequency converter.
- The machine CPU equipped with remote control for maintenance.
- The latest CE-regulations are completely observed. The electrical equipment corresponds with IEC-60204-1 standards.