

# ASP-631 WL Premium



An automatic grinder with a rotating head for sharpening and profiling woodworking and metal cutting saws with different tooth geometry [including curved teeth], controlled in 5 axes, with automatic tooth pitch measurement (using the Renishaw probe).



# ASP-631 WL PREMIUM

## Features of the ASP-631 WL PREMIUM

- Five numerically controlled axes
- Grinding of the back and face of most currently available tooth geometries in one cycle, without having to change the tool position and the wheelhead manually
- An intuitive and clear control system with a graphical user interface
- Sharpening saws using regular and irregular tooth pitches
- Minimum machine operating costs
- Robust and well thought-out design
- Electronically controlled tooth pitch
- High precision, maintenance-free dividing head
- Automatic travel of the grinding wheel until it touches the clearance surface of the first tooth
- Detecting and skipping broken teeth.

## Outcome

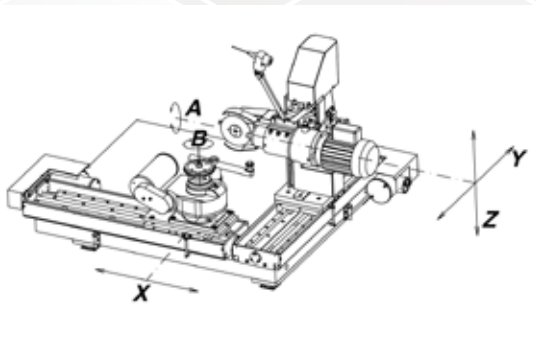
- The perfect combination of precision and performance
- The highest price/quality ratio.



# Design Assumptions

The grinder is designed for automatic sharpening and profiling TCT and HSS circular saws with diameters from 100 mm to 630 mm (optionally 800 mm).

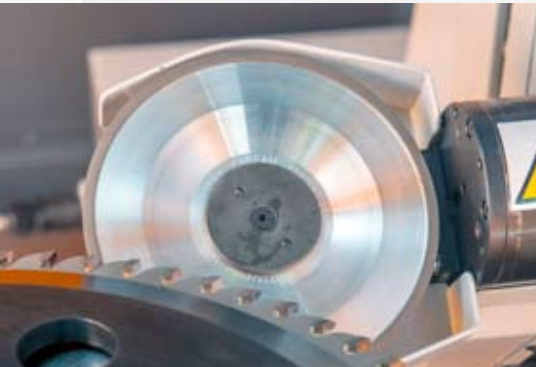
- The rotary wheelhead enables the sharpening of trapezoidal teeth, alternate bevel teeth and the A, Aw, B, Bw, BR, C teeth, during a single sharpening cycle (machine does not cut chip breaker)
- Five numerically controlled axes enable complete grinding of all available teeth shapes used in the woodworking and metal industry
- Robust and compact design
- Adjusting the rake and clearance angles from the controller
- No hydraulic systems
- Using highest quality components
- Manufactured in Poland
- Electronically controlled tooth pitch
- No need to retool the dividing head manually, i.e. changing the pusher or other mechanical parts
- Automatic measurement of the tooth spacing with the Renishaw probe version
- Automatic travel of the grinding wheel until it touches the clearance surface of the blade tooth



**Well thought-out design**  
Five numerically controlled axes



**An intuitive control system with a touch panel**



**Sharpening the clearance surface and bevelling**



**Compact and robust design**



**High-end components**



**Sharpening of the face and tooth profiling**

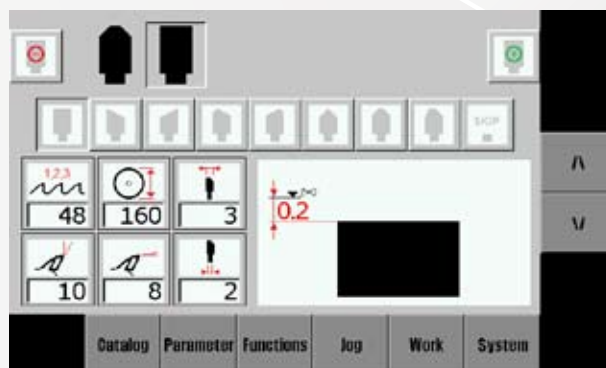
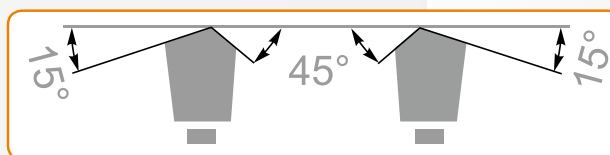
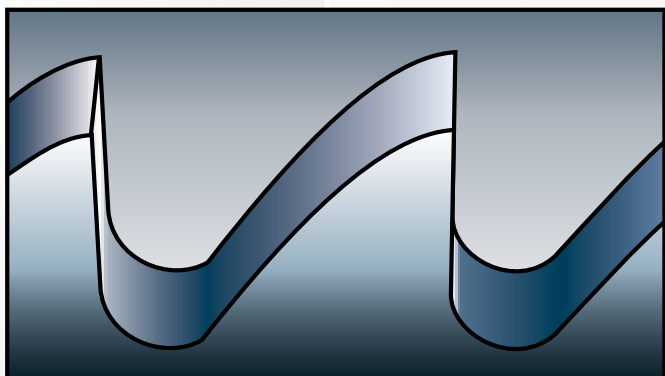
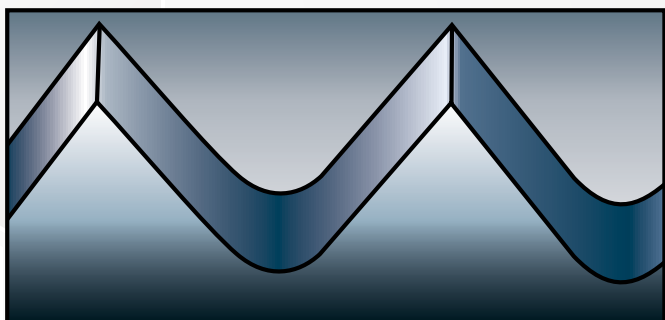
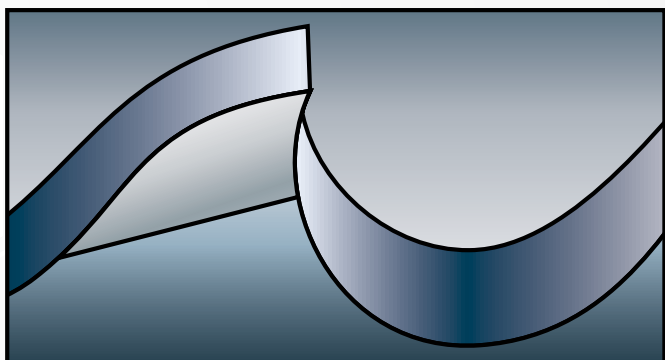
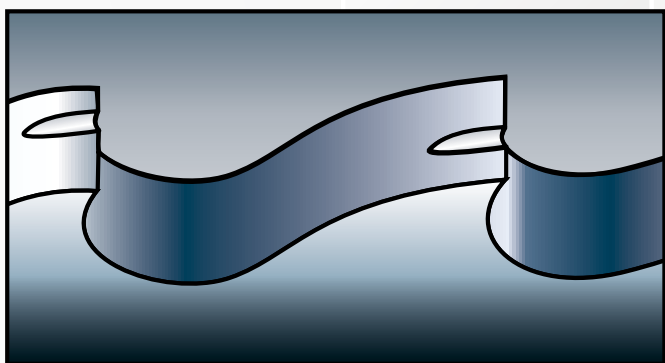
# Description and application

Polish engineering solutions combined with the work of our design engineers resulted in the creation of the technologically advanced ASP-631 WL PREMIUM grinder for sharpening tools like the majority of the woodworking saws available on the market (straight teeth, trapezoidal teeth, alternate bevel teeth, bevel teeth on both sides), with regular and irregular tooth pitches, and metal slitting saws with curved teeth, used for cutting steel, rubber, or plastic.

The use of 5 numerically controlled axes enables the automatic positioning of the wheelhead against the tool axis, and the sharpening and profiling of teeth. The machine also makes it possible to remove old teeth and then make new teeth, according to pre-set parameters. The use of the probe also enables detecting and skipping broken teeth. In addition, the machine has a feature of automatic travel of the grinding wheel until it touches the clearance surface of the first tooth.

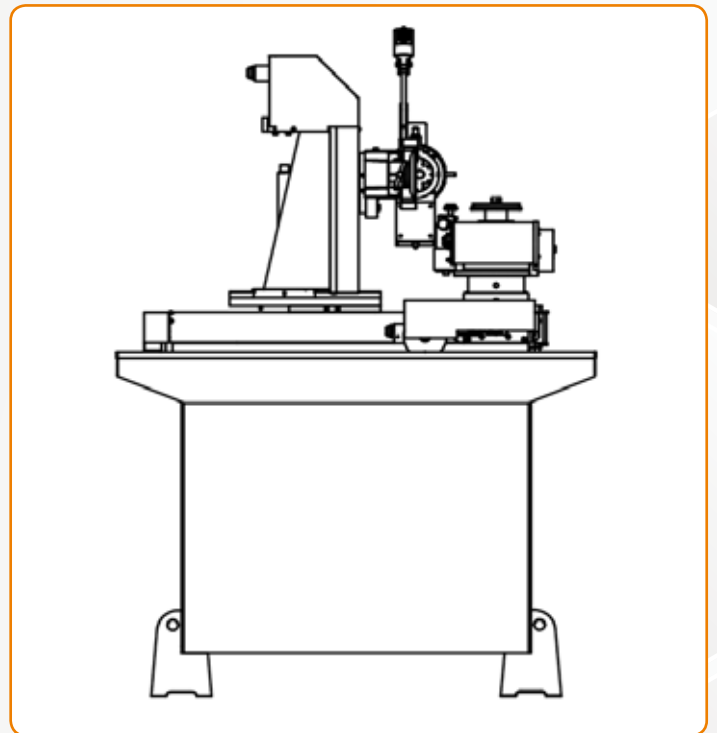
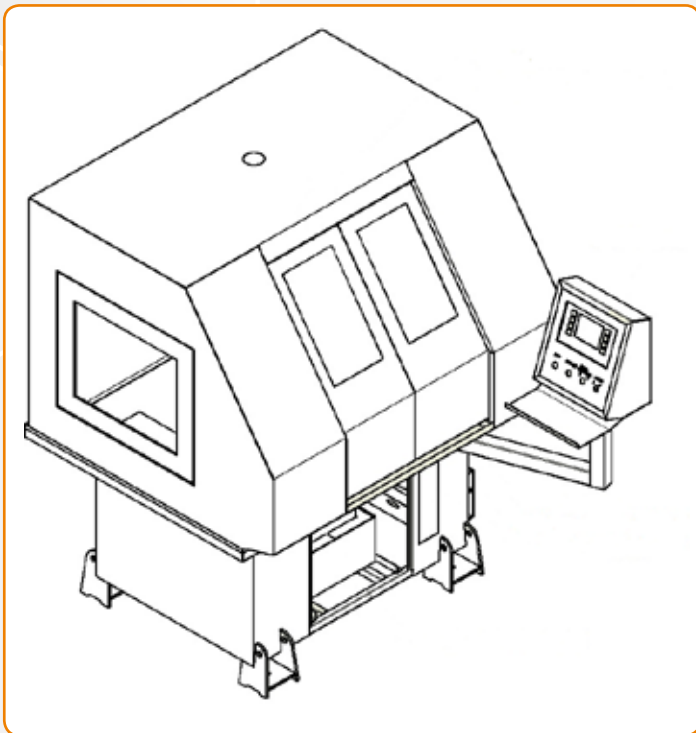
# Advantages

- 5 numerically controlled axes
- Electronically controlled tooth pitch
- Robust and compact design
- Programmable variable sharpening speeds
- Internal memory for saving saw parameters
- Sharpening and profiling woodworking and metal cutting saws
- An intuitive control system for programming the necessary tool and operating parameters
- Programmable tooth combinations
- Using of support and pressure disks to stabilise the saw
- A self-aligning head for sharpening clearance angle in a single sharpening pass
- Using highest quality components
- Skipping broken teeth
- Two-grinding-wheel system operation
- Fully enclosed design
- Removal and cutting new teeth
- Automatic tooth spacing measurement
- Skipping broken teeth
- Travel of the grinding wheel until it touches the clearance surface of the first tooth



# TECHNICAL DATA

External diameter of the sharpened saw	100 - 630 mm
The number of sharpened teeth	2 - 999
Incremental feed rate during sharpening	0,01 - 0,99 mm
The number of programmable sharpening passes	0 - 99
Grinding speed	0,1 - 2 m/min
Rake angle	-10° do +30°
Clearance angle	+5° do +45°
Grinding wheel diameter	150 mm
Diameter of the fixing hole	40 mm
Installed power	2 kW
Coolant tank capacity	Approx. 40 litres
Weight	Approx. 550 kg
Dimensions	1540x1700x1800 mm



## Standard Components

- A stand with a booth
- Cooling system
- A set of reduction rings
- Supporting disks
- A set of wrenches
- A starting package (grinding wheel and coolant)



# Technologia ostrzenia



# Grinding Technology



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