

# MONTANA<sup>®</sup>

# CRYSTAL ONE



# CRYSTAL ONE 2.0

AUTOMATIC, COMPACT NEXT GENERATION SERVICE STATION

 12/h



SCAN ME

STONE GRINDING

SIDE EDGE GRINDING

BASE EDGE BEVELLING



Welcome to the world of automated ski service! The new CRYSTAL ONE 2.0 impresses with its first-class results and space-saving design. Impressive technology in the smallest of spaces. MONTANA ski service robots are exceptionally robust, high quality and made to last. With VARIO

structures, stone grinding is performed on a 160 mm wide stone. The GRIPtech system for the side edge represents a leap in quality in ski service, creating a precise, sharp, and durable RACE EDGE quality edge for skis of any width. High Tech Tuning (HTT) enables a polished edge with a minimal

tuning angle for optimal gliding and turning performance. A combined unit for stone grinding and tuning automates these work steps, thereby reducing the amount of labour required. This makes the CRYSTAL ONE 2.0 an extremely economical option.

# BENEFITS

## AUTOMATE YOUR SKI SERVICE



- PowerVac vacuum system for vacuuming all ski surfaces
- Automatic stone grinding for 1 ski with pressure curve
- 2 dressers (1x electric for stone, 1x pneumatic for HTT)
- Double-sided edge grinding with GRIPtech system
- High-tech tuning (HTT) of the edges on the base side
- Radial tuning
- Compact design
- Ready for Montana Digital World
- High-quality 12" touch panel

## AUTOMATION IN SKI SERVICE

With the revision of the new **CRYSTAL ONE 2.0**, the machine has been further improved in terms of performance and size, and brought up to date with the latest machine generation. With CRYSTAL ONE 2.0, you can optimise your service processes and always remain at the cutting edge of performance, efficiency and technology.

### OPTION:

- VARIO structures
- Pair loading
- Compressor with refrigeration dryer
- Oil mist extraction
- Gravity filter system
- Water cooling

OVER 80 YEARS OF EXPERIENCE IN THE DEVELOPMENT OF INNOVATIVE TECHNOLOGIES AND SKI SERVICE MACHINES



## STONE GRINDING

The MONTANA structural system can be used to create a wide variety of structures: From simple linear structures to complex, computer-controlled Vario structures for world cup racing ski preparation.

The legendary MONTANA stone grinding ensures precisely cut structures and is distinguished by its fully fibre-free base grinding. The MONTANA VARIO structures enable different structure patterns across the width of the sports equipment.

## HIGH-TECH RADIAL TUNING

In this special process, the skis are tuned more strongly in the wider area (i.e. in the shovel and tail areas) so that the edges hang down more. Less suspended grinding is used in the binding area. This results in an edge angle that varies over the entire length of the ski and is adapted to the respective curve radius.

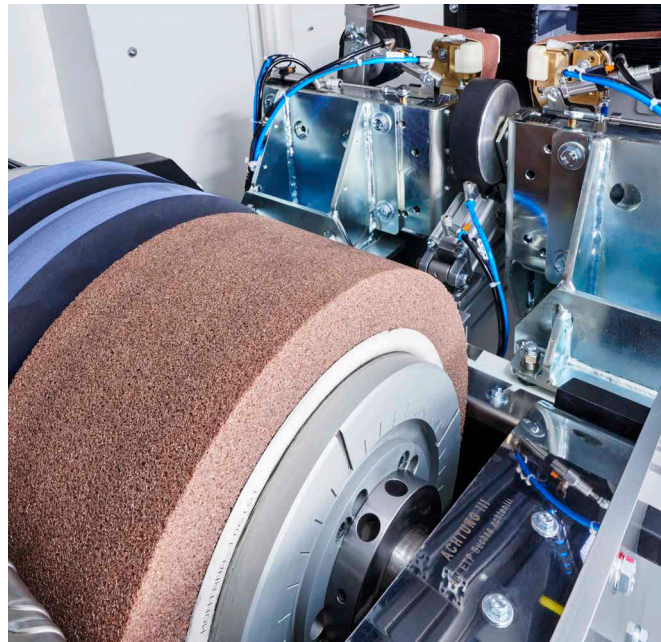
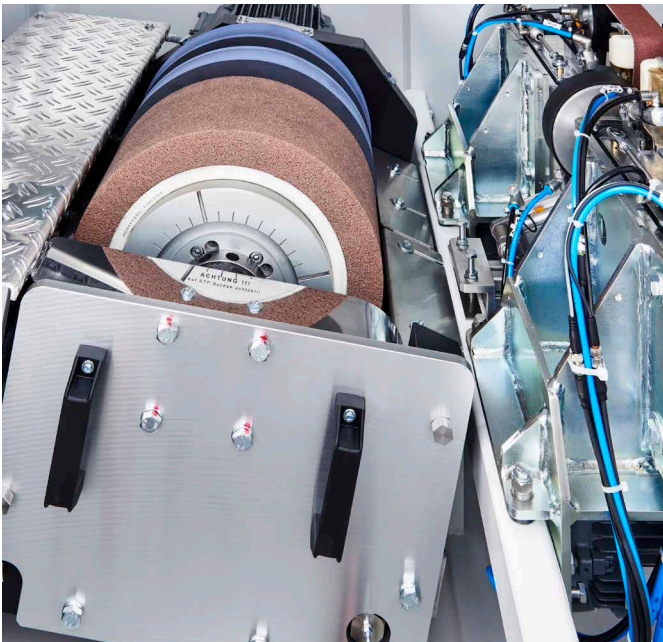
Radial tuning makes the skis much easier to turn and, in particular, greatly improves edge grip under the binding. With radial tuning, the rider can abort the initiated turn in full swing without the risk of falling.

## GRIPTECH SIDE EDGE AGGREGATE

GRIPtech stands for ultimate grip and maximum fun on the piste. Precise grinding and a defined, even edge angle of 89°–86° provides perfect grip and exceptional carving properties. The GRIPtech system grinds vertically, resulting in precise, sharp and durable edges. Grinds all functional areas of your sports equipment from shovel to tail in premium RaceEdge quality.

Whether you're on skis or a snowblades, GRIPtech offers ultimate riding pleasure and safety with its uncompromising hold.

## INCREASE EFFICIENCY WITH THE COMBINED UNIT FOR STONE GRINDING AND TUNING



## BASE GRINDING

- Grinding of all models of ski, snowblade and cross-country ski regardless of bindings
- Computer-controlled grinding programs with direct online access to individually adjust the most important parameters for each ski
- Reproducible grinding results thanks to fully automatic speed adjustment to the sanding disc diameter
- VARIO structures

## GRINDING SIDE EDGES WITH GRIPTECH

- Side edges with GRIPtech system for a precise, sharp, and durable edge.
- Easy 90°–86° edge angle adjustment in 0.5° steps
- Programmable aggregate closing time
- Electronically controlled pressure curves ensure precise aggregate contact with the ski
- Vertical grinding provides a particularly beneficial sharpness and edge shape (microstructure)

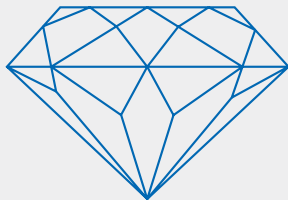
## RADIAL TUNING

- High Tech Tuning (HTT) enables a polished edge with a minimal tuning angle for optimal gliding and turning performance for skis
- Electronically controlled cutting speed
- Electronically controlled pressure curve ensures precisely defined grinding pressure above the grinding point

## MANUAL LOADING

- High-quality 12" touch panel
- Automatic centring
- PowerVac vacuum system regardless of ski surfaces
- Ergonomically optimised working height
- Optional pair loading

**MONTANA®**  
CRYSTAL GLIDE FINISH

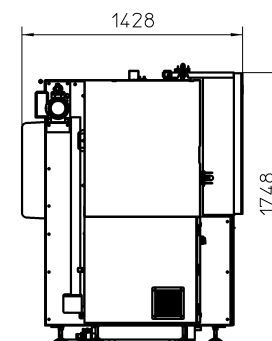
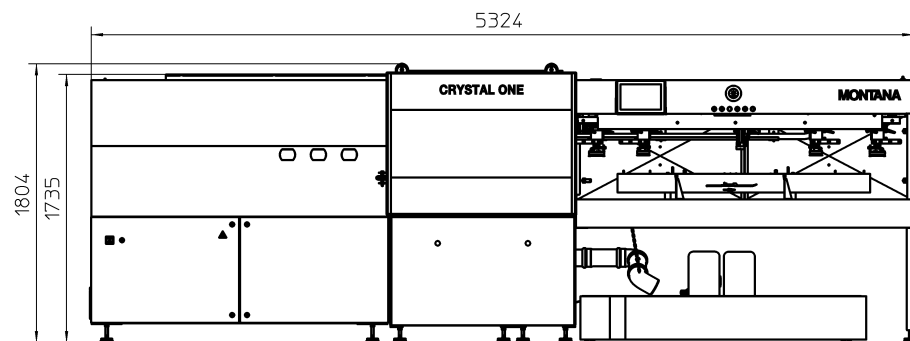
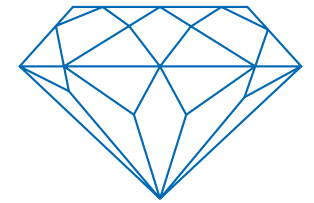


# TECHNICAL DATA

Product design:	manual loading
Power:	max. 7 kW
Voltage:	3 x 400 Volt / 50/60 Hz, transformer for special voltages
Fuse:	3 x 16 A
Tank capacity:	250 L
Stone width:	160 mm
Stone speed:	300 to 1,900 rpm
Cutting speed:	6 to 32 m/s
Feed:	5 to 30 m/min
Compressed air:	min. 6 bar 600 l/min
Total weight without emulsion:	1,950 kg

**GRID**<sup>®</sup>  
tech.

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**THE WORLD OF EXCELLENCE**

ski & board service machines | rental systems | skins