





### BLUE PEARL

# HIGH PERFORMANCE SERVICE ROBOT FOR SKIS: NON-STOP SLOPE-READY MONTANA QUALITY

The new BLUE PEARL service robot is the ideal system for rental stations and workshops with high service volumes in excess of over 15,000 pairs of skis: The performance of 75 pairs of skis per hour with 4 stone contacts makes the BLUE PEARL the fastest MONTANA system yet. This high throughput is achieved by an innovative and refined sequence in the grinding process using 2 separate axes and loading units, which leaves no possibility for downtimes during processing.

The service procedure runs fully automatically: Automatic ski length recognition allows the 7-plate suction system to adapt itself to the ski geometry, thus ensuring fast, reliable processing.

Integrated PRO-technology ensures all ski models, including rockers and twin tips, are ground perfectly flat and structured on 2 stones at the ski tip and tail. The side edges are then ground using the proven ceramic belts running over gliding blocks.

The new HTT 3D finish including PRO-technology allows radial tuning as well as new tuning variants. Finally, the ski is automatically waxed and polished.

The BLUE PEARL with 2 stones and waxing unit combines uniquely high throughput with best service quality.

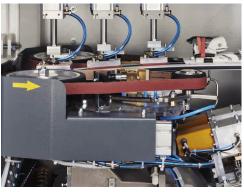
#### **ADVANTAGES**

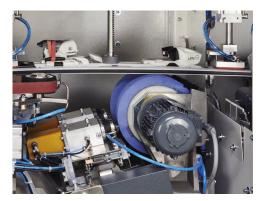
- Highest throughput: 75 pairs of skis per hour with 4 stone contacts
- Large 15" touch display with intuitive navigation
- Automatic length recognition
- PowerVac system for suction of all ski surfaces
- Automatic stone grinding for 1 pair of skis with pressure and force curve
- PRO-technology for especially careful grinding even at the ski tip and tail
- Double-sided edge grinding with pressure and force curve
- Double-sided High-Tech Tuning for edges with pressure and force curve
- 3D tuning for radial tuning and variably adjustable tuning angle
- NC drives for high-precision dresser feed for stone grinding and tuning and shuttle
- Waxing and polishing unit
- Automatic filter system
- Integrated remote maintenance
- 2 separate axes and loading units for processing without downtime
- Ready for "Montana Digital World"

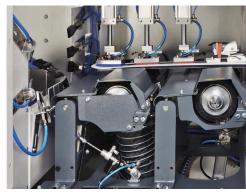
#### **OPTION**

- Vacuum filter system
- Compressor with refrigeration dryer
- Oil mist suction system









#### **BASE GRINDING**

- Unlimited storage for computercontrolled grinding programs with direct online access for individual adaptation of the most important parameters
- MONTANA PRO-technology: electronically controlled force curves for precisely defined grinding pressure over the grinding point
- NC drives for the dressing units of the stones: highest precision at high speeds
- Reproducible grinding results thanks to fully automated rpm adjustment to the diameter of the grinding disc
- VARIO structures
- 10-step depth adjustment of the dressing tool from 0.5/100 6/100 mm

#### SIDE EDGE GRINDING

- Side edge unit with fully ceramic gliding blocks for skis
- Easy adjustment of edge angle 87°–89°
- Programmable closing times of the units
- Electronically controlled pressure and force curves for precisely defined grinding pressure at the grinding point

#### **RADIAL TUNING**

- HTT tuning ensures a finely polished edge with a minimal tuning angle for best gliding and turning capabilities for skis
- NC drives for the dressing unit of the tuning discs: highest precision at high speeds
- 3D-High-Tech-Tuning (HTT) with variable tuning angle
- Electronically controlled cutting speed
- MONTANA PRO-technology:
   Electronically controlled pressure and force curves for precisely defined grinding pressure over the grinding point

# AUTOMATIC WAXING 2-STEP WAX SYSTEM

- Wax application with heated waxing roll
- Polishing with separate brush





#### LOADING, FULLY AUTOMATIC OUTPUT

- Automatic ski length recognition
- Automatic suction plate adjustment
- Automatic centring
- Automatic loading and unloading with storage for 7 pairs of skis with bindings
- 2 shuttles with NC drives for highest precision at high speeds
- PowerVac suction system for every ski surface
- Ergonomically ideal working height

- Fully graphic colour touch display with new, intuitive navigation for quick and easy access to all functions
- Network-enabled PC control with Windows Embedded 7



## PRO-TECHNOLOGY

#### OPTIMAL FOR ROCKER SKIS

With this development grinding is controlled even more precisely – and can even grind the shovel and the tail. The resulting structures are outstanding.

Detailed description page 9



FEATURES	BLUE PEARL
Loading:	automatic
Adjust for vacuum plates:	automatic
Stones:	2
PRO-technology:	•
Side edge:	Ceramic Band
3D-Tuning:	•
Step motor to control wheel dressing and tuning:	•
Waxing/Polishing:	•
Ski blow off unit:	•

TECHNICAL DATA	BLUE PEARL
Rated power:	max. 17 kW
Voltage:	3 x 400 volt / 50/60 Hz, special voltage via trafo
Fuses:	3 x 30 A
Stone width:	320 to 340 mm
Stone speed:	300 to 1.900 u/min
Cutting speed:	6 to 32 m/s
Feed:	5 to 30 m/min
Compressed air:	min. 6 bar, 1.100 l/min
Total weight:	4.560 kg excl. coolant mixture

TECHNICAL DATA	FILTERANLAGE & KÜHLANLAGE
Tank volume:	1.700
Rated power (Filtration & cooling system):	11 kW
Fleece width:	710 mm



