

## BOTTOM-SPINDLE MULTI-BLADE PANEL SAW model “MSR 130P bs pd”

IN CONFORMITY WITH 2006/42/CE NORM



WORKING CONCEPT:





### TECHNICAL CHARACTERISTICS:

- N°3 independent frames for the adjustment of the milling depth.
- Positioning of the frames by threaded columns with transmission by gearboxes, in order to make easier and safely all the set-up operations.
- Safety protection hoods with noise-reduction panels in order to ensure noises emission in conformity with the ISO EN ISO 4871/2009 norm.
- Conformity with the Electromagnetic Compatibility Directive 2014/30/EU, the Low Voltage Directive 2014/35/EU and the Machinery Directive 2006/42/EU.
- The whole operation logic is managed by a PLC with digital data communication by profibus cable system. The input of the technical data is by touchscreen operating panel.
- Remote electrical box and 3m of cables (**Ref. 8**).
- Advancement group composed by:
  - 1 pair of motorized safety rollers at panels input with electropneumatic control and automatic cycle of thickness adjustment (**Ref. 2**) during the working process.
  - 4 motorized upper rubber coated rollers with grooves.
  - 4 free lower ground steel zinc-plated rollers.
  - 1 Pair of ejector rollers for automatic stacker of the worked pieces at the output of the machine (**Ref. 6**)
  - analogic ammeter for the electrical absorption of the main motor and the advancement motor.
  - motorized rollers opening regulation with possibility of self-adjustment to avoid thickness difference among one panel and another.
  - 1 working table with interchangeable insert made of MDF.
  - 24 movable and conveying hold-down wheels “pd” above the spindle (**Ref. 4**) placed on double row. These rods with wheels are connected by a quick flange system and can be replaced without dismount any bearings.
  - automatic adjustment of the depth of the projection of the saw blades, with insertion of the quotes and readout of the position by touchscreen operating panel with centesimal resolution.
  - motorized adjustment of the thickness of the panel with insertion of the quotes and readout by touchscreen operating panel with decimal resolution.
- 1 bottom tools holder spindle group (**Ref. 3**), composed by:
  - spindle Ø 80 x 1310 mm - 4000 r.p.m. (with double tangs) with automatic anti-rotation clutch locking.
  - toothed belt transmission with automatic star-delta switch motor 55 kW.



- ☐ removable support of the spindle (right side) with safety interlock device
- ☐ automatic locking and unlocking of the HSK collector (left side) controlled with electropneumatic action with device for the automatic cleaning of the coupling cone
- ☐ safety device that features a presence and positioning sensor of the shaft
- ☐ closed circuit air cooling device for the shaft bearings with temperature sensor
- ☐ central support (dimensions: 30 mm) of the spindle with automatic locking

### TECHNICAL DATA:

- 3 top dust suction collectors Ø 200 mm
- Dust suction capacity at 30 m/sec: 10500 m<sup>3</sup>/hour
- Advancement speed from 3 to 45 m/min' with electronic regulation through A.C. 1,5 kW geared motor with inverter
- Maximum working width capacity: 1300 mm
- Panels minimum length: 450 mm
- Projection of the driven rollers: flat
- Working level height: variable, from 970 up to 1300 mm
- Motorized opening of the rollers: 0 - 300 mm max
- Projection of the saw-blades from the working table adjustable: from 0 to 62 mm with circular saw-blades or hogger trimmer Ø 280 mm max
- Max. milling depth: 22 mm with mills Ø 200 mm
- Example of productivity: 240 panels each hour (1000 x 2440 mm format sheet at 15 m/min of advancement – considering to load 4 panels each minute)
- Change over time expectation: around 10 minutes
- Max pneumatic air consume with connection at 7 bar: 200 Nl/hour
- Pneumatic air connection: 3/8"
- Supply power: 400V/50 Hz, control Voltage: 24 V
- Total power installed: 60kW - 1 set of spanners.
- Instructions manual for use and maintenance
- Electric and pneumatic equipment diagram.
- Machine colour: RAL 7036 grey & RAL 7032 grey
- Dimensions: 2860 x 1420 x 2200 mm H approx.
- Weight: Kg 3800 approx.



### Included:

- N°1 Shafts magazine, with the capacity of n.3 shafts in storage, complete with the Working desk, where is possible to disassemble the tooling spindles and check the linearity and the static balancing of the shaft. Overall dimensions 1700 x 1300 x 1800H mm (**Ref. 16**)
- N°1 Shafts transport and loading carriage, in order to manage the spindle from the working desk or shafts magazine directly to the telescopic sled of the MSR Overall dimensions 2300 x 1200 x 2000H mm (**Ref. 15**)

### On request:

- Spacer rings with double keyways (outside Ø 100 mm - hole 80) for circular saw-blades, made of ground steel and zinc-plated, produced on size upon request as following:
  - o widths from 1 to 10 mm
  - o widths from 11 to 25 mm
  - o widths from 26 to 50 mm
  - o widths from 51 to 75 mm
  - o widths from 76 to 100 mm
  - o widths from 101 to 125 mm
  - o widths from 126 to 150 mm
- Circular Saw Blade HM Ø 250 x 2,5 (1,8) z30
- Circular Saw Blade HM Ø 250 x 2,5 (1,8) z40
- Circular Saw Blade HM Ø 280 x 2,5 (1,8) z40

We always recommend to use our original spacer rings and tools.

- N°1 Additional shaft, complete of threaded locking nuts (each)
- N°1 Additional central support (30mm width)



Fig. 1 – View of the machine during the rapid change of the tools-holder shaft (bottom shaft version)



Fig. 2 – View of the touchscreen control panel





**Fig. 3 – Typical installation of a MSR machine**



**Fig. 4 – Typical multi-cutting of plywood sheets**



Fig. 5 – View of the shafts magazine



Fig. 6 – Shaft transport and loading carriage









