

Profimat Series – Time has come for the next generation



Name

Target group

Small and medium-sized businesses in developed markets
(main focus on Europe and CE-countries)

- Small to medium output
- Regular changeover of the machine
- Machine runs on occasion
- Small to medium variety of products
- Not only used to manufacture end products
- Mostly used by trained staff

Former WEINIG products for this market segment

- Quattromat 18/ 23
- Profimat 22N/ 23
- Unimat 300/ 500

Models

Profimat 30

- Cast iron frame
- 4 or 5 spindles (B-R-L-T-B/ B-R-L-T-x)
- Feed speed up to 15 m/min
- Optional tool packages with aluminium cutterheads for the horizontal spindles



Profimat 50

- Cast iron frame
- 5 or 6 spindles (B-R-L-T-B/ B-R-L-T-T-B)
- Feed speed up to 30 m/min
- Optional tool packages



Profimat 30



Features and customer benefits:

- Robust and durable machine frame from vibration-absorbing cast iron
- Compact design
- Safety equipment according to latest standards
- Integration of low-maintenance components
- 😊 High surface quality
- 😊 Little space requirement
- 😊 High operator safety
- 😊 High reliability

Technical data

Working height	8 - 120 mm
Working width	13 - 230 mm
Working width 260 mm	○
Spindle speed 6,000 1/min	●
Mechanical digital read-outs	●
Digi-Set for left and top spindle	○
Machine control package incl. Memory Plus, electronic digital read-outs and CNC-controlled axes for width and thickness	○
Frequency-controlled feed speed	6 - 15 m/min
Package standard motors	5.5/ 7.5/ -/ 5.5/ (5.5) kW
Package increased motor power	7.5/ 11/ -/ 11/ (7.5) kW
Tool cutting circle (except 1 st bottom spindle)	125 - 200 mm
Straightening table	2 m
Start and stop of all spindle drives via frequency converter	●
Driven table roller (outfeed)	○
Manual lubricant pump	●

● Standard ○ Option

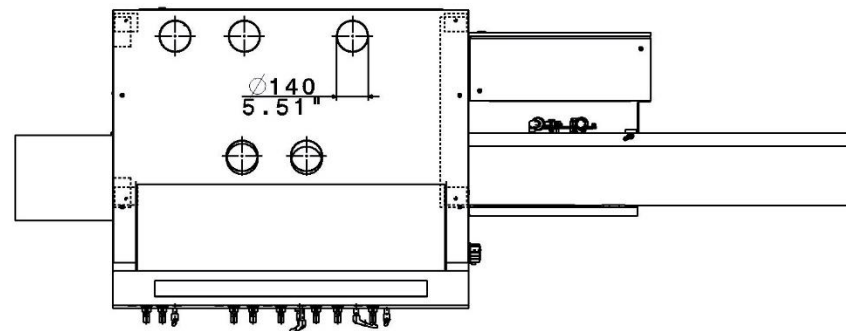
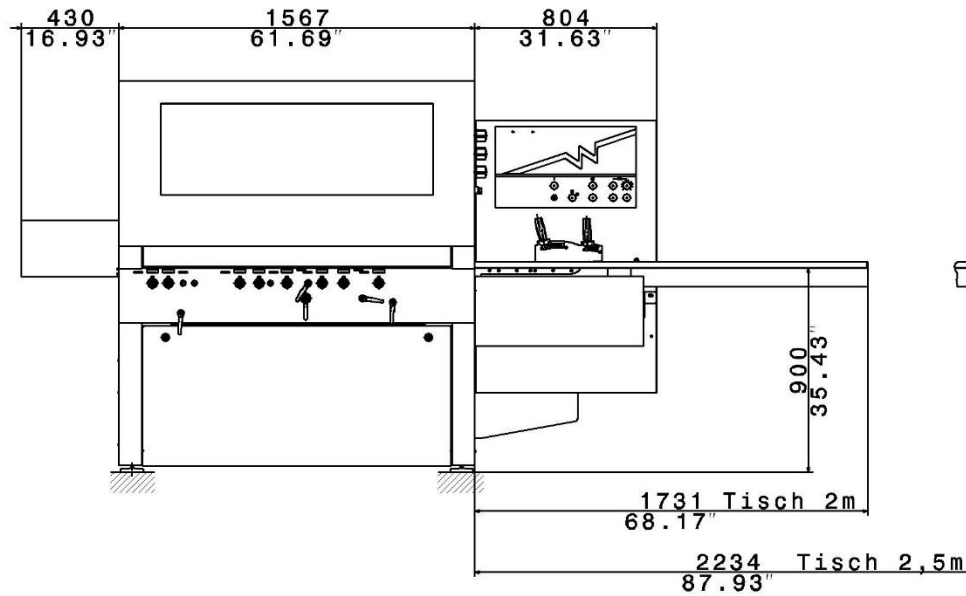
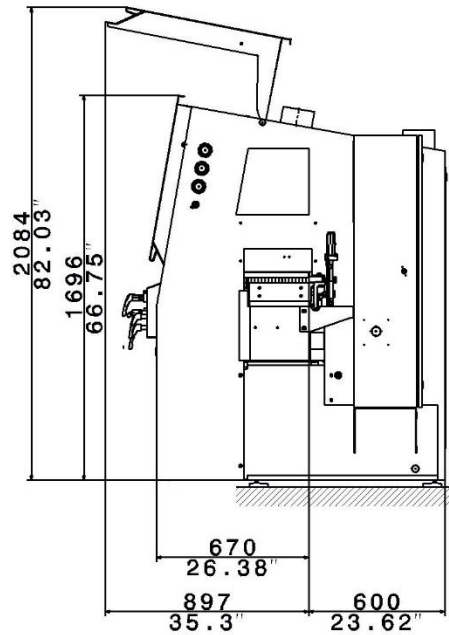
Floor space requirement



Features and customer benefits:

- Width behind fence line 0.6 m
- Electric cabinet lengthwise behind straightening table
- Loading and transport using forklift or lifting cart
- 😊 Little floor space requirement
- 😊 Machine can be placed close to a wall
- 😊 Simple repositioning of the machine, if required

Floor space requirement



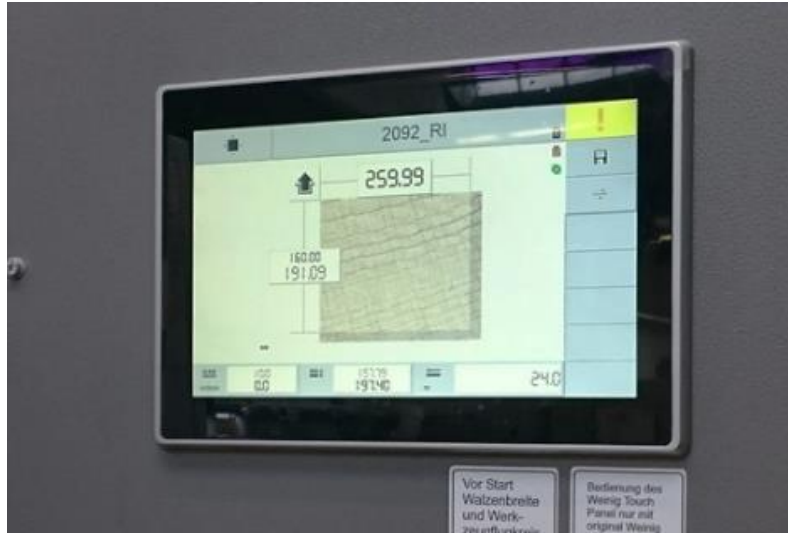
Machine control



Features and customer benefits:

- Without user interface
- Mechanical digital read-outs for axial and radial position of all spindles (except 1st bottom spindle)
- Mechanical digital read-outs for pressure elements
- Option Digi-Set for left and top spindle
- 😊 Simple machine operation using wood sample or profile card and without knowledge of a machine control
- 😊 Reading of the current position of each spindle
- 😊 Reading of current position of pressure elements
- 😊 Reading of workpiece width and thickness after adjustment of tool radius (Digi-Set)

Option machine control



Features and customer benefits:

- **Option machine control package**
 - Memory Plus with 10.1" panel
 - Electronic digital read-outs
 - CNC-controlled axes for width and thickness
- 😊 **Saving of profile data and setting values of max. 500 profiles**
- 😊 **Very good legibility of the machine control**
- 😊 **Automatic adjustment of width and thickness to a set value**

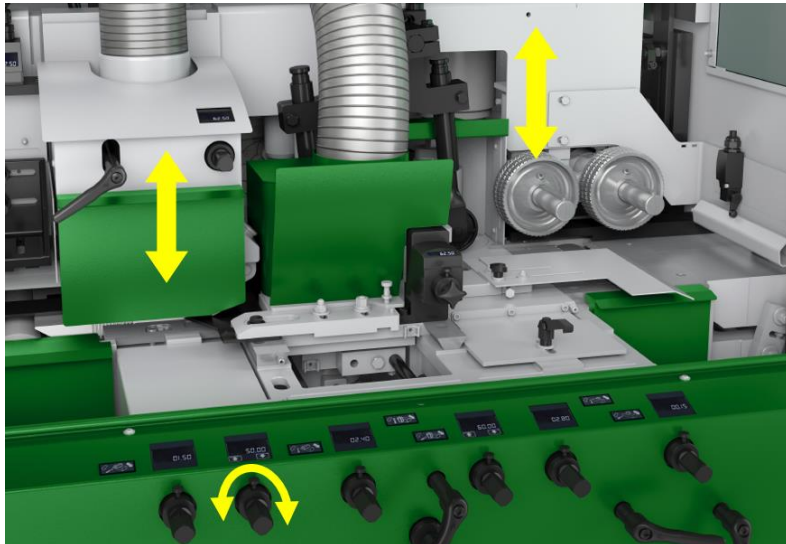
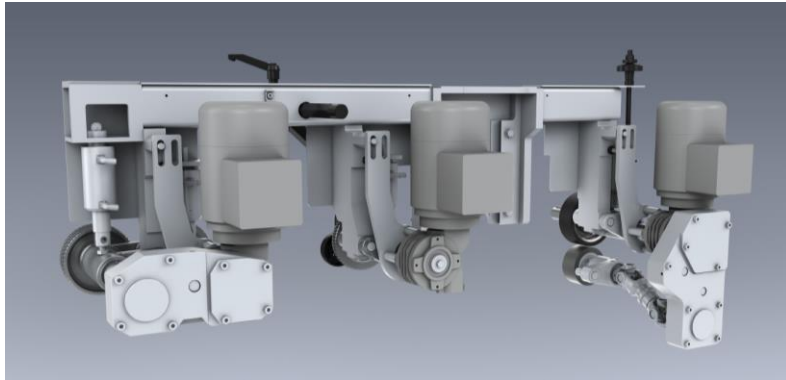
Machine electrics



Feature and customer benefits:

- Use of frequency converters to start and stop all spindle drives
- 😊 Robust and reliable technology
- 😊 Reduced power peaks during start and stop of the machine
- 😊 High energy efficiency also when operating at partial load
- 😊 Reduced thermal stress of the motors when braking the spindles
- 😊 Little vulnerability to fluctuation of the power supply

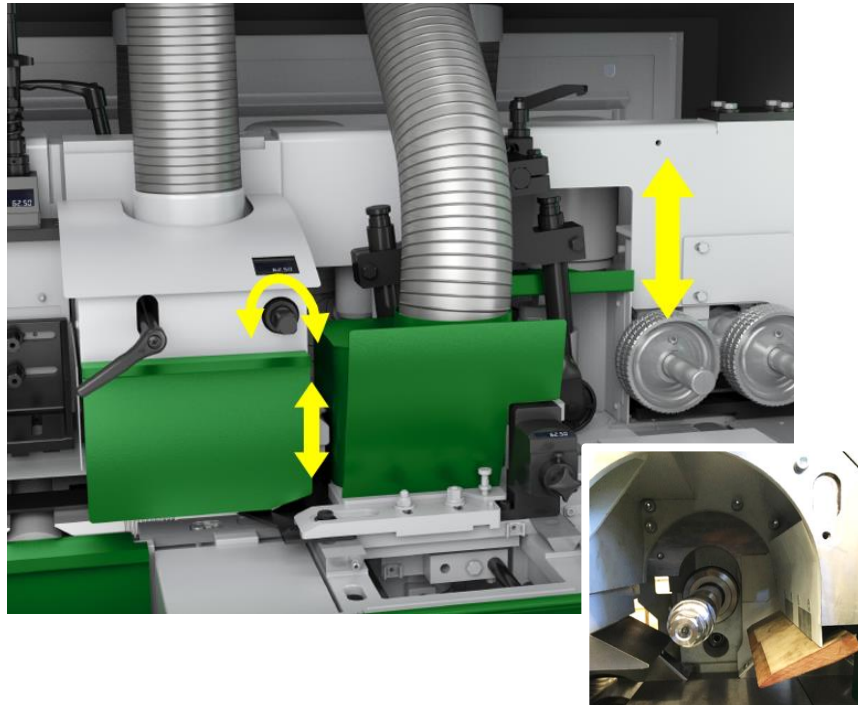
Feed system



Features and customer benefits:

- Feed system with separate drives
- Feed rollers with quick adjustment and diameter 140 mm
- Central adjustment and positioning of feed beam together with top spindle incl. pneumatic clamping
- Adjustment of feed system relative to top spindle
- 😊 Robust and reliable technology
- 😊 Smooth running of feed rollers and very good power transmission due to pointed tooth rollers
- 😊 Little space requirement due to elimination of a separate feed beam slide
- 😊 High stiffness of feed system due to clamping at the machine infeed
- 😊 Height adjustment of feed system independent from tool cutting circle of the top spindle

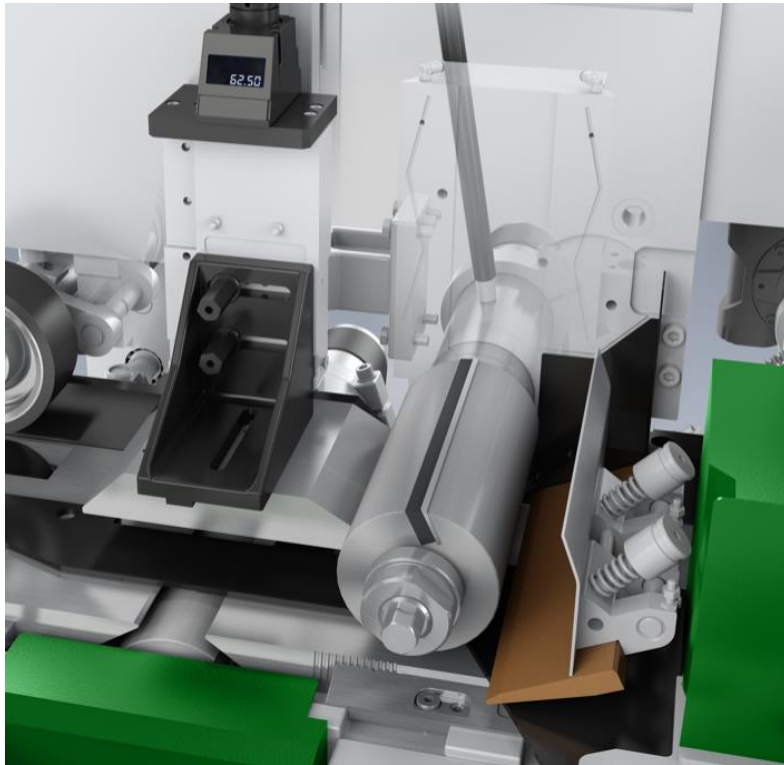
Pressure shoe in front of top spindle



Features and customer benefits:

- Split pressure shoe in front of top spindle made of hard tissue (HGW), spring-loaded and not receding from the tool
- 2 sets of pressure shoes (short and long)
- Pressure shoe separately adjustable in height, incl. digital read-out
- 😊 No damage on the tool due to thick raw material as the pressure shoe is made of hard tissue
- 😊 Suitable pressure shoe for each application (S4S planing or profiling)
- 😊 Height adjustment of pressure shoe together with the feed system

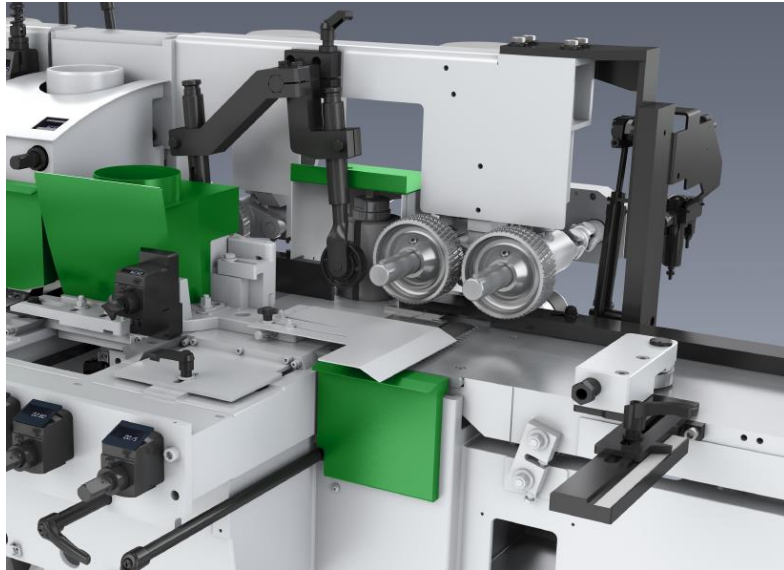
Pressure shoe after top spindle



Features and customer benefits:

- Pressure shoe after top spindle serves as pressure shoe above bottom spindle
- Pressure shoe mounted on the spindle slide of the top spindle and therefore decoupled from the feed system
- Separate height adjustment of the pressure shoe, incl. digital read-out
- 😊 High surface quality on last bottom spindle due to high stiffness of the pressure shoe
- 😊 Optimum guiding of the workpieces due to decoupling from the feed system and occurring vibrations
- 😊 Height adjustment of the pressure shoe independent from the top spindle

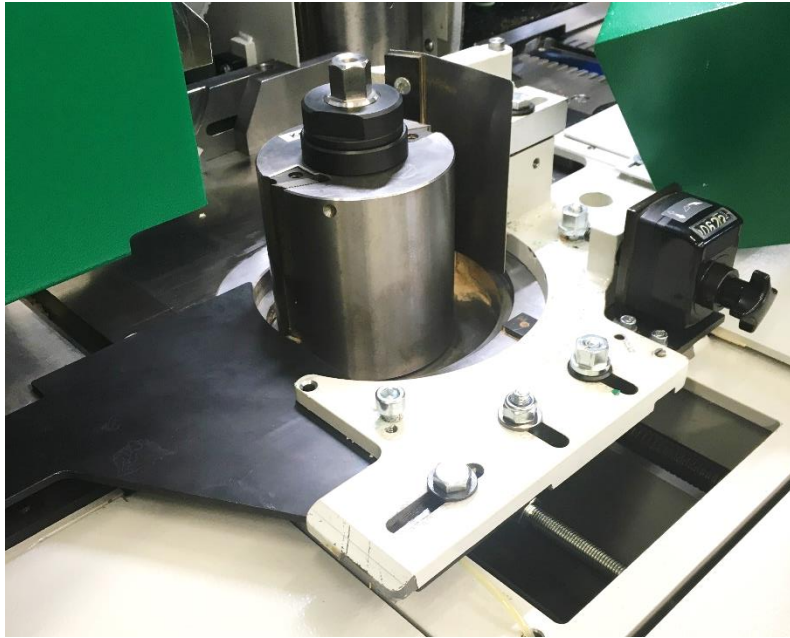
Options pressure elements



Features and customer benefits:

- Lateral pressure roller at infeed table
- Receding top pressure rollers opposite right and left spindle
- Reduced roller distance opposite right spindle
- 😊 Secure guiding of the workpieces
- 😊 Properly set pressure rollers play a deciding role in the quality of the finished products

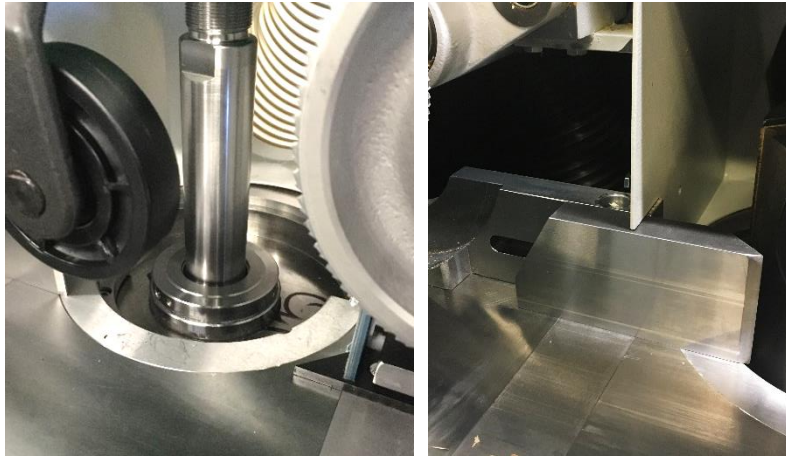
Lateral guiding fence



Features and customer benefits:

- Lateral guiding fence moving with the left spindle
- Lateral guiding fence 5 mm thick
- Adjustment together with pressure shoe in front of left spindle
- Incl. digital read-outs
- 😊 No adjustment requirement for dimensional changes
- 😊 Increased ease of use
- 😊 Accurate adjustment to radial minimum

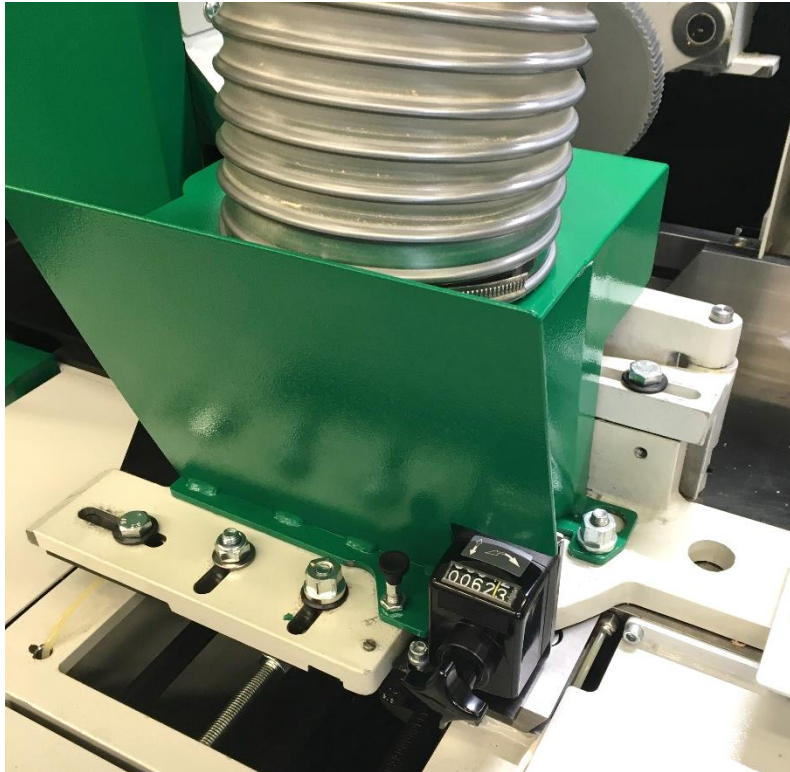
Machine table and fence



Features and customer benefits:

- Machine table on vertical spindles designed to tool cutting circle 200 mm
- Inserts to reduce the notch
- Inserts for max. tool cutting circle 125 mm in standard
- Optional inserts for max. tool cutting circle 150 mm or with guide knife
- Fence lip after right spindle adjustable to tool cutting circle using a slotted hole
- 😊 Very good guiding of the workpieces due to reduction of the notch in table and fence
- 😊 Suitable inserts for each application (S4S planing or profiling)
- 😊 Additional improvement of guiding using inserts with guide knife

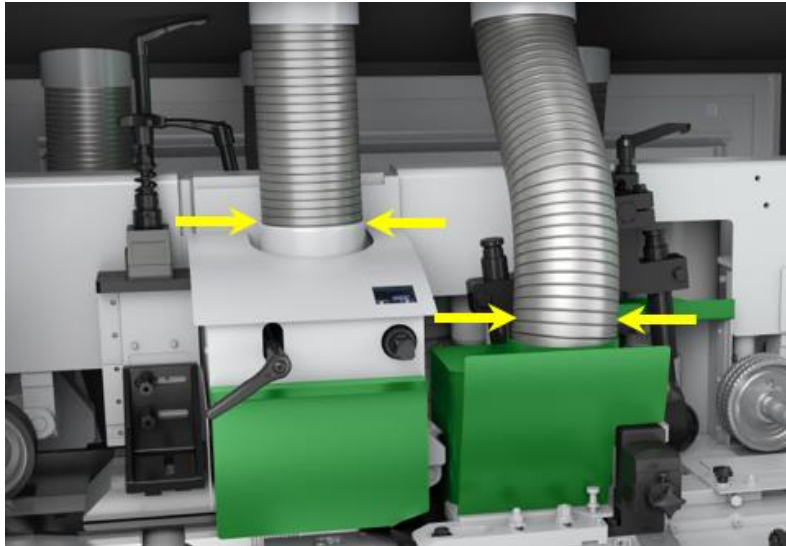
Accessibility of left spindle



Features and customer benefits:

- Dust extraction hood of left spindle detachable
- Clamping of the hood using a screw
- Additional pin to hold the hood in the right position when mounting the dust extraction hood
- 😊 Very good accessibility of left spindle for tool change
- 😊 Quick mounting and dismounting of the hood
- 😊 Simple mounting of the hood in the right position

Dust extraction



Features and customer benefits:

- Diameter of extraction hoses 140 mm
- Required air velocity 23 - 26 m/s
- 😊 Reduction of required air velocity in comparison with smaller diameters
- 😊 Energy savings of ca. 20% compared to diameter 120 mm
- 😊 Additional reduction of noise and wear of extraction hoses

Option working width 260 mm



Features and customer benefits:

- **Package working width 260 mm**
 - **Package increased motor power**
 - **Pressure rollers opposite vertical spindles**
 - **Driven table roller in the outfeed**
 - **Pressure shoe after top spindle extended**
 - **Additional feed rollers**
- 😊 **Secure guiding of finished workpieces with a max. width of 260 mm**
- 😊 **High surface quality also on wide workpieces**

Profimat 50



Features and customer benefits:

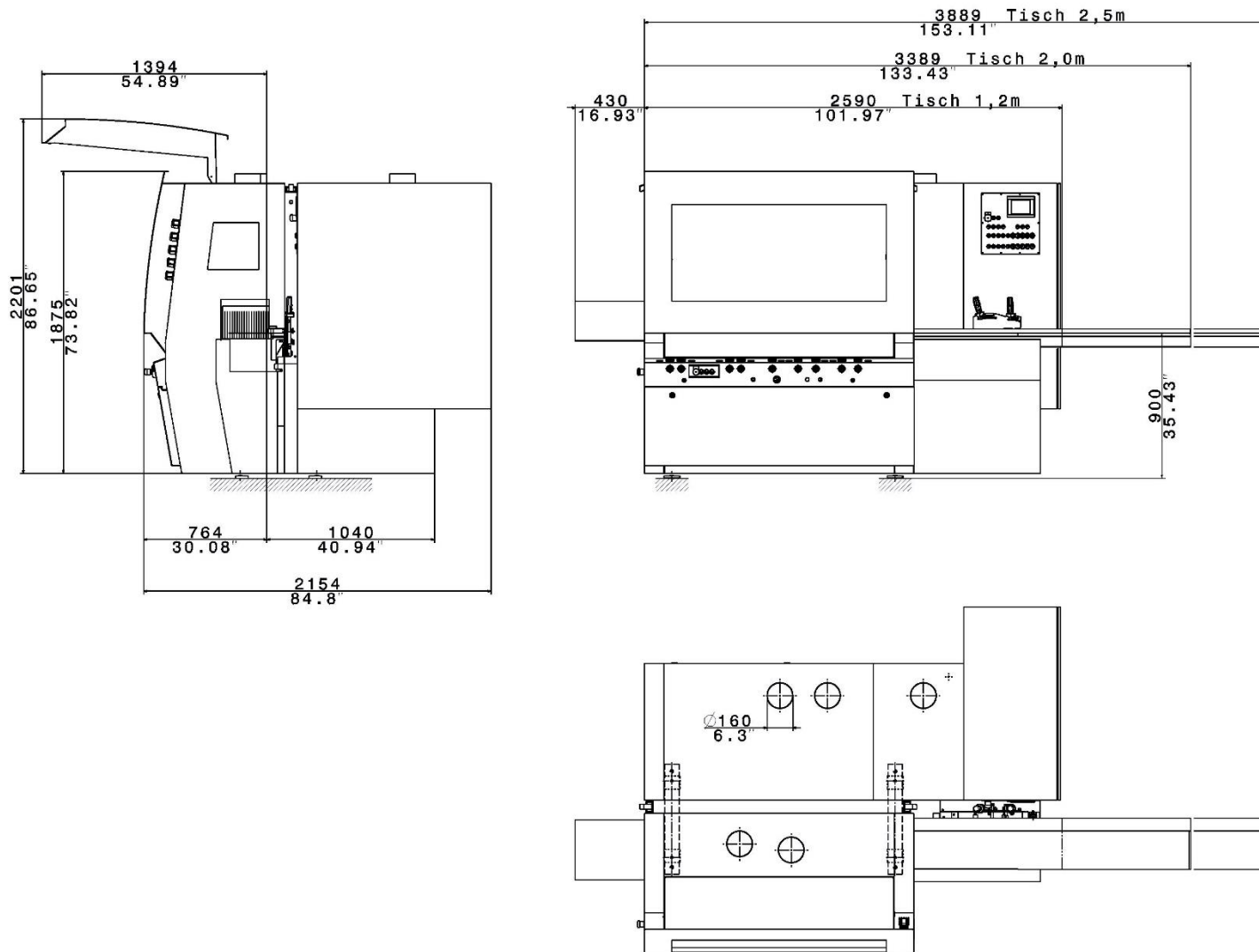
- Robust and durable machine frame from vibration-absorbing cast iron
- High ease of use and very good accessibility
- Integration of high-quality spindles
- Safety equipment according to latest standards
- 😊 High surface quality
- 😊 High ease of use
- 😊 Excellent surface quality
- 😊 High operator safety

Technical data

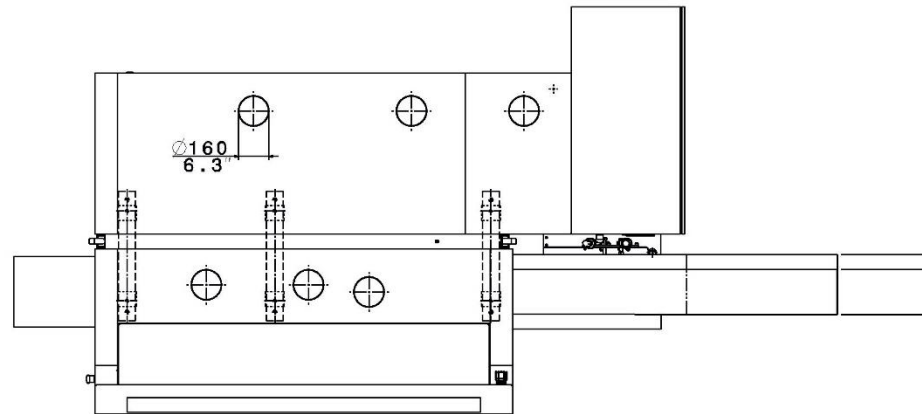
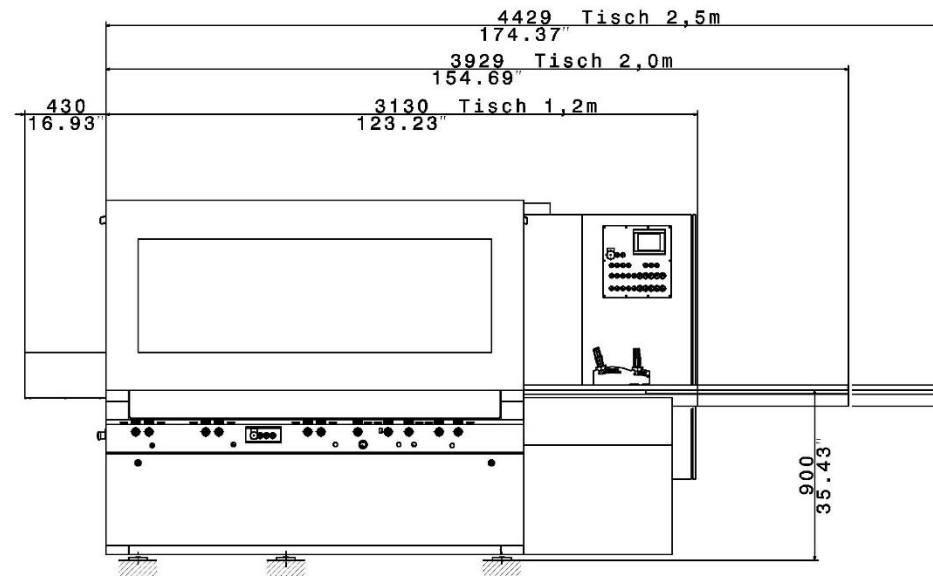
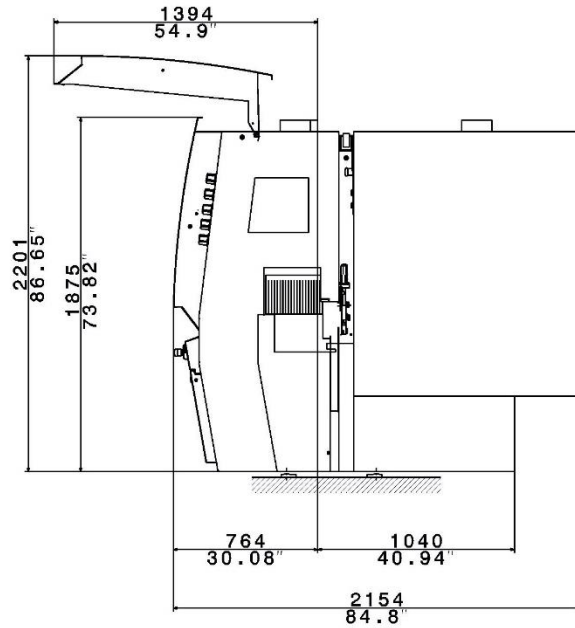
Working height	10 - 160 mm
Working width	20 - 230 mm
Working width 260 mm	○
Spindle speed 7,000 1/min (except 1 st bottom spindle)	●
Spindle speed 8,000 1/min	○
Mechanical digital read-outs with Digi-Set for left and top spindle	●
Machine control package incl. Memory Plus, electronic digital read-outs and CNC-controlled axes for width and thickness	○
Frequency-controlled feed speed	5 - 30 m/min
Motor power	5.5/ 7.5/ -/ 5.5/ (5.5)/ 5.5 kW
Max. motor power	15 kW
Tool cutting circle (except 1 st bottom spindle)	125 - 200 mm
Straightening table	2 m
Infeed table 1.2 m with 3 roller infeed	○
Start and stop of all spindle drives via frequency converter	●
Manual lubricant pump	●

● Standard ○ Option

Floor space requirement 5 spindles



Floor space requirement 6 spindles



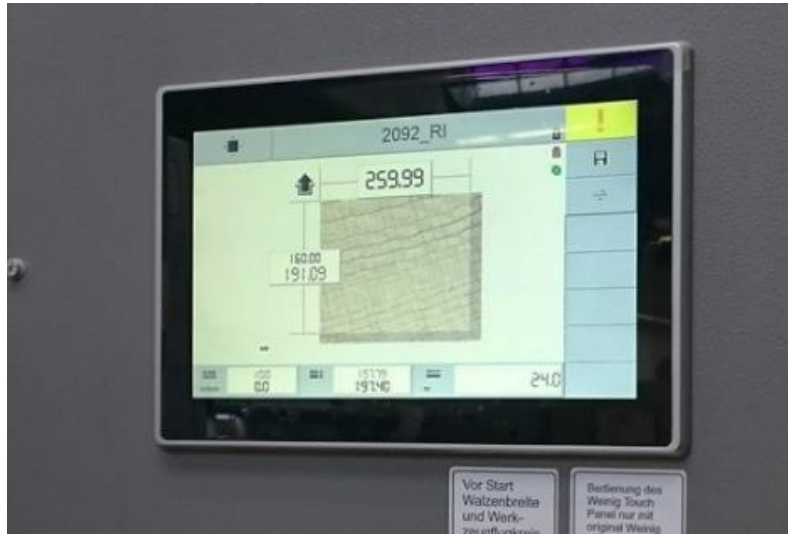
Machine control



Features and customer benefits:

- Without user interface
- Mechanical digital read-outs for axial and radial position of all spindles (except radial 1st bottom spindle)
- Digi-Set for left and top spindle
- Mechanical digital read-outs for pressure elements
- ☺ Simple machine operation using wood sample or profile card and without knowledge of a machine control
- ☺ Reading of the current position of each spindle
- ☺ Reading of workpiece width and thickness after adjustment of tool radius
- ☺ Reading of current position of pressure elements

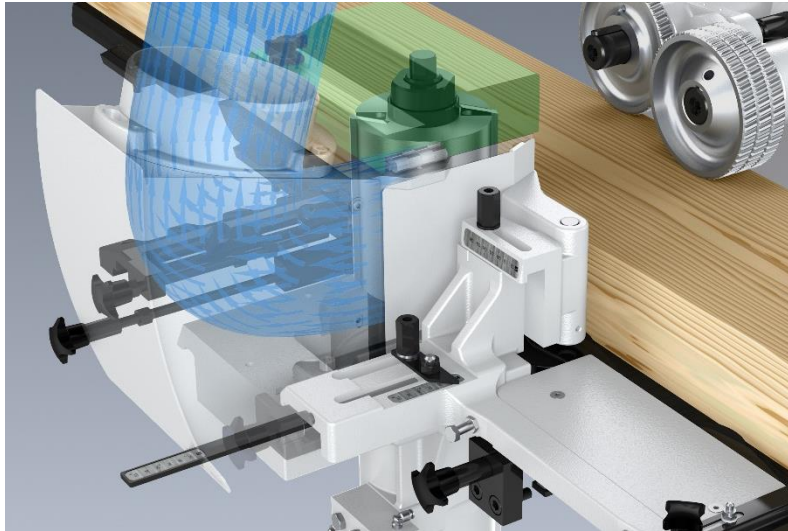
Option machine control



Features and customer benefits:

- **Option machine control package**
 - Memory Plus with 10.1" panel
 - Electronic digital read-outs
 - CNC-controlled axes for width and thickness
- 😊 **Saving of profile data and setting values of max. 500 profiles**
- 😊 **Very good legibility of the machine control**
- 😊 **Automatic adjustment of width and thickness to a set value**

Positioning according to rulers



Features and customer benefits:

- Rulers inside of the machine to accurately adjust pressure elements and guides
- 😊 Specific, quick and simple setup
- 😊 Reduction of setup times
- 😊 Properly set pressure elements and guides play a deciding role in the quality of the finished products

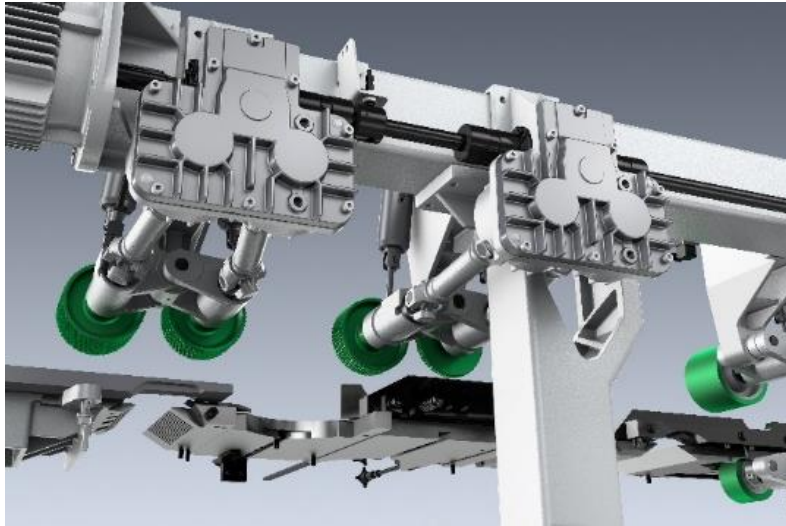
Machine electrics



Feature and customer benefits:

- Use of frequency converters to start and stop all spindle drives
- 😊 Robust and reliable technology
- 😊 Reduced power peaks during start and stop of the machine
- 😊 High energy efficiency also when operating at partial load
- 😊 Reduced thermal stress of the motors when braking the spindles
- 😊 Little vulnerability to fluctuation of the power supply

Feed system



Features and customer benefits:

- Feed system with frequency-controlled feed motor, main shaft, gear boxes and cardan shafts
- Separate adjustment and positioning of feed beam and top spindle
- Feed rollers with diameter 140 mm
- Feed rollers with quick adjustment
- 😊 Robust and reliable technology
- 😊 Height adjustment of feed system independent from top spindle
- 😊 Smooth running of feed rollers and very good power transmission due to pointed tooth rollers
- 😊 Quick and simple adjustment of feed rollers in axial position

Pressure elements



Features and customer benefits:

- Split pressure shoe in front of top spindle, pneumatic and receding from tool
- Horizontal plane of adjustment of the pressure shoe
- Pressure shoes in front of and after top spindle separately adjustable in height, incl. digital read-outs
- 😊 No collision of pressure shoe with the tool in case of thick raw material
- 😊 No exchange of pressure shoes required
- 😊 Reduction of setup times
- 😊 Properly set pressure elements play a deciding role in the quality of the finished products

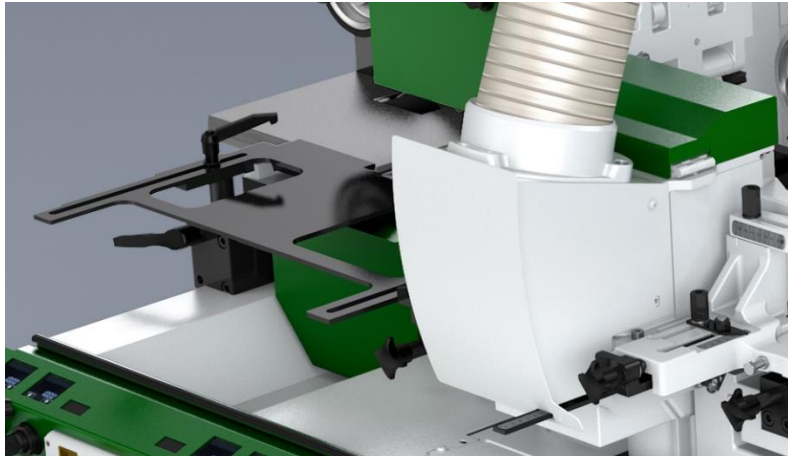
Options pressure elements



Features and customer benefits:

- Lateral pressure roller at infeed table
- Receding top pressure rollers opposite right and left spindle, pneumatic
- Reduced roller distance opposite the right spindle
- 😊 Secure guiding of the workpieces
- 😊 Properly set pressure rollers play a deciding role in the quality of the finished products

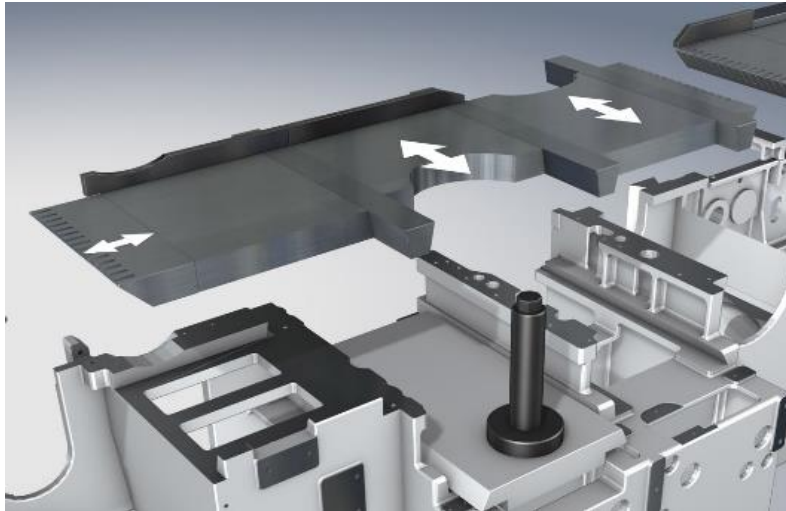
Lateral guiding fence



Features and customer benefits:

- Manual guiding fence adjustable in width and height
- Guiding fence 6 mm thick
- 😊 Adjustment of guiding fence according to the workpiece width during inching mode
- 😊 Adjustment in height according to contact point of the profile

Machine table and fence



Features and customer benefits:

- Table plates and fence lip after the right spindle continuously adjustable to the tool cutting circle
- Driven table roller in the outfeed
- 😊 Very good guiding of workpieces due to reduction of the notch in machine table and fence
- 😊 Reduction of setup times
- 😊 Properly set guides play a deciding role in the quality of the finished products

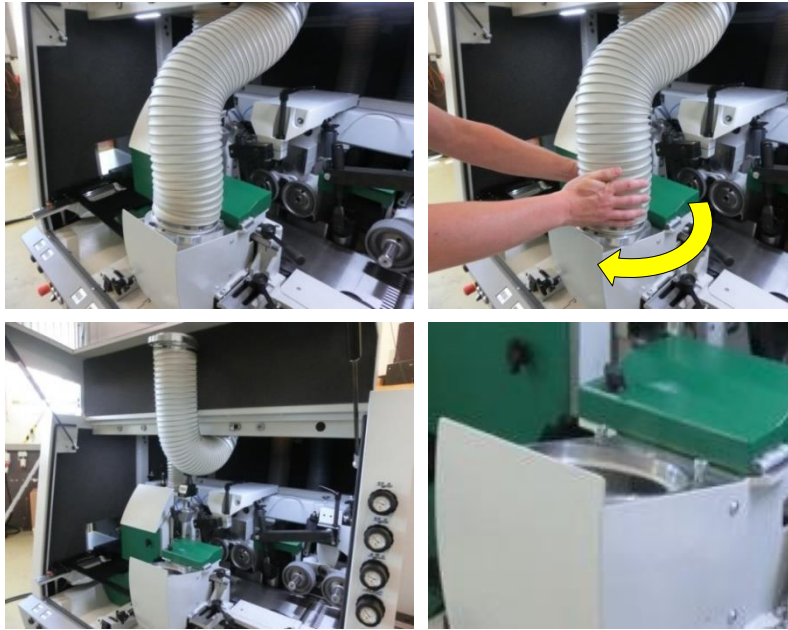
Options machine table and infeed table



Features and customer benefits:

- Option MarathonCoating
- Option groove guide
- Option table plates for wooden insert
- Option extension of straightening table to 2.5 m
- Option infeed table 1.2 m with 3 roller infeed
- 😊 High wear resistance due to MarathonCoating
- 😊 Secure guiding of short or difficult to guide workpieces in the groove guide
- 😊 Highest quality in terms of dimensional accuracy and parallelism due to groove guide
- 😊 Ripping with max. cutting height 45 mm
- 😊 Robust machine infeed with table roller to process large dimensions or wet timber

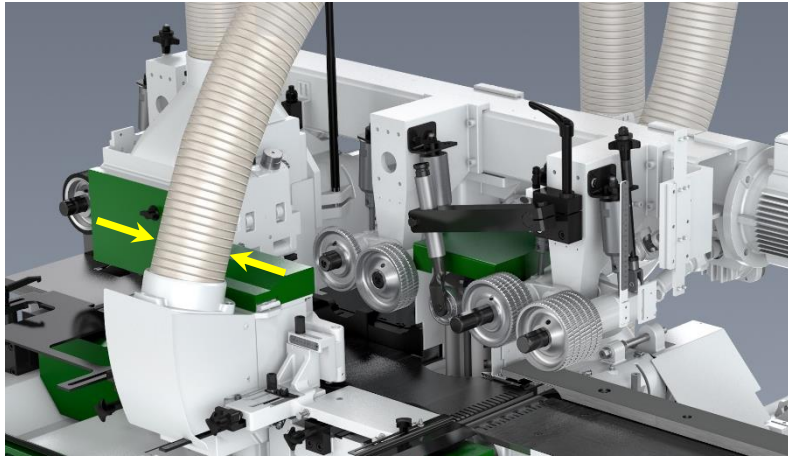
Accessibility of left spindle



Features and customer benefits:

- Hose can be detached from the dust extraction hood
- Clamping at the hood using a bayonet connection
- Docking station on the machine cover holds the hose in position when detached
- 😊 Improved accessibility of left spindle for tool change
- 😊 Increased ease of use

Dust extraction



Features and customer benefits:

- Diameter of extraction hoses 160 mm
- Required air velocity 23 - 26 m/s
- 😊 Reduction of required air velocity in comparison with smaller diameters
- 😊 Energy savings of ca. 20% compared to diameter 140 mm
- 😊 Additional reduction of noise and wear of extraction hoses

Option working width 260 mm



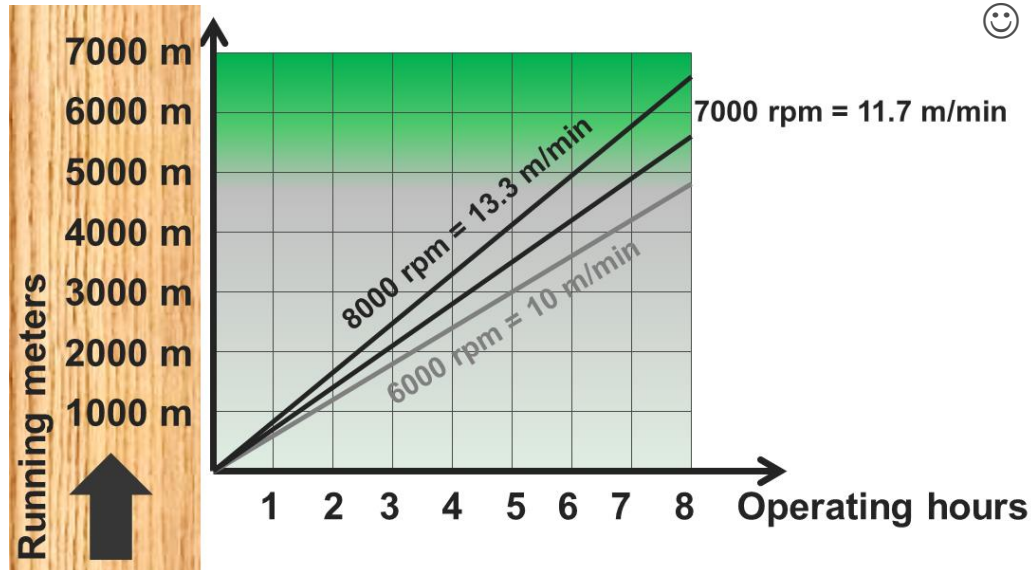
Feature and customer benefits:

- Working width 260 mm
- 😊 Secure guiding of finished workpieces with a max. width of 260 mm
- 😊 High surface quality also on wide workpieces

Option for performance increase

Features and customer benefits:

- Optional spindle speed 8,000 1/min
- Mechanical and electric preparation for feeders
- 😊 15% - 33% more production without reducing the surface quality
- 😊 Without raising the feed speed the higher rpm will reduce the cuttermark spacing
- 😊 Continuous feeding of the moulder



Comparison of Profimat 30 with Cube Plus

Profimat 30

- 4 or 5 spindles
- Moulder
 - Cutting depth
 - Adjustable pressure elements
 - Axial adjustment
- Manual machine set-up
- Training/ experience with moulders required

Cube Plus

- 4 spindles
- Planer (4 straight sides)
- No machine set-up
 - Input of dimensions
 - CNC-controlled positioning
- No training required

Comparison of Profimat 30 with Profimat 50

Profimat 30

- 4 or 5 spindles
- Feed speed 6 - 15 m/min
- Spindle speed 6,000 1/min
- Motor power up to 11 kW for the top spindle
- No coating of machine table
- Limited range of axial adjustment
 - Vertical and top spindles 30 mm
 - 2nd bottom spindle 10 mm

Profimat 50

- 5 or 6 spindles
- Feed speed 5 - 30 m/min
- Spindle speed 7,000 rpm
 - Option 8,000 rpm
- Motor power up to 15 kW
- No coating of machine table
 - Option MarathonCoating
 - Option groove guide
- Full range of axial spindle adjustment
 - Vertical spindles 80 mm
 - Horizontal spindles 40 mm

Comparison of Profimat 50 with Powermat 700

Profimat 50

- 5 or 6 spindles
- Joint drive for both vertical spindles
- Feed speed 5 - 30 m/min
- Standard Digi-Set and mechanical read-outs
 - Option control package with Memory Plus and electronic digital read-outs
- CNC-controlled axes for adjustment of width and thickness only (as part of the control package)
- Standardized nuts for clampings inside the moulder (open-jaw wrench required)
- Quick adjustment of feed rollers
- Electric cabinet with filter fan
- Hand pump under the straightening table for lubricant

Powermat 700

- 5 to 7 spindles
- Option individual drive for vertical spindles (not in combination with 5 spindles)
- Feed speed 5 - 40 m/min
- Standard Memory Plus with electronic digital read-outs
- CNC-controlled axes for radial and axial adjustment of each spindle possible (except axial on 1st bottom spindle)
- Locking levers inside the moulder for wrench-free machine setup
- Quick adjustment of feed rollers and fence lip after right spindle
- Electric cabinet with cooling device
- Foot pump at machine infeed for lubricant



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