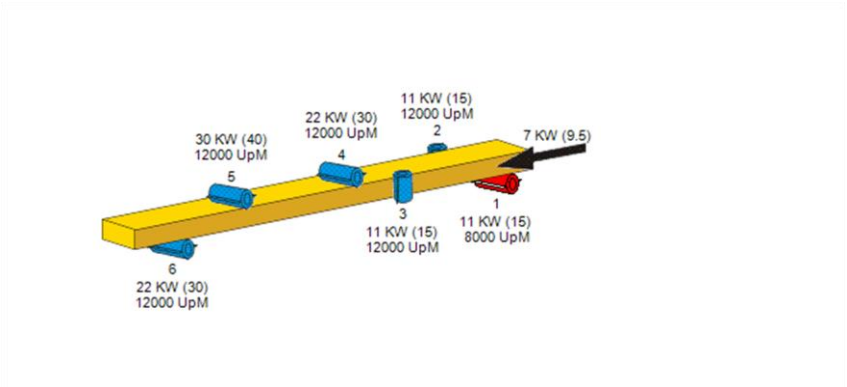
Technical Specification

Automatic planer and moulder
Weinig Powermat 1500.

1826391*

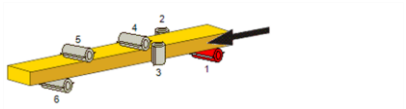


Tool arrangement no. 018

Operating concept Comfort Set
A unique operating concept with scales and clear measurements located at all relevant setting points in the machine. All setup requirements can be performed either wrench-free or with the assistance of only two hand tools.
This results in ergonomic and safe setup for the operator, short setup times and high quality of the end product.

Technical data	
Working width (with tool cutting circle 93 - 163 mm)	20 - 230 mm
Working height (with tool cutting circle 93 - 163 mm)	10 - 160 mm

1. spindle



First horizontal bottom spindle

8152307 Motor	11 KW (15 HP)
8103241 Diameter	1 13/16"
4095120 Revolution speed	8000 rpm
1226187* Tool cutting circle Tool cutting circle rebate cutter	 125 - 180 mm 130 - 160 mm
125156* Setting range axial	17 mm

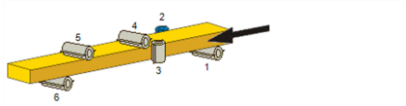
107285

Electronical digital display for radial adjustment

1469072
WITHOUT rebate facility and WITHOUT rebate cutter

384274*
MarathonCoating for table insert, in front of
1st bottom tool holder

2. spindle



First right vertical spindle

8144743 Motor	11 KW (15 HP)

4114508

PowerLock - tool holder

4112902

Revolution speed	12000 rpm

1827756*

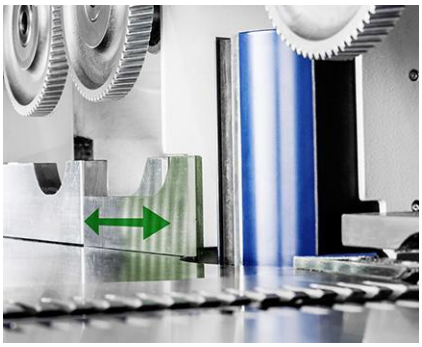
Tool cutting circle	93 - 200 mm
Tool cutting circle for planer heads max.	200 mm

2153014*

Maximum profile depth	35 mm

229302

Setting range axial	55 mm



Fence lip after the right vertical spindle with quick adjustment
Your advantages:
- Reduced setup time due to quick positioning to the tool diameter
- Improved surface quality on the workpiece due to the small gap in the area of the right spindle

1613949*

Pressure roller from above located opposite the right spindle pivoting out of the way, spring loaded.

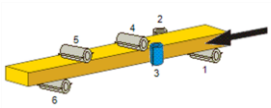
1635667

Axial CNC-controlled adjustment and positioning of tool holders in combination with Memory - Function or with PowerCom.

1635668

Radial CNC-controlled adjustment and positioning of tool holders in combination with Memory - Function or the PowerCom.

3. spindle



First left vertical spindle

8144743
Motor — 11 KW (15 HP)

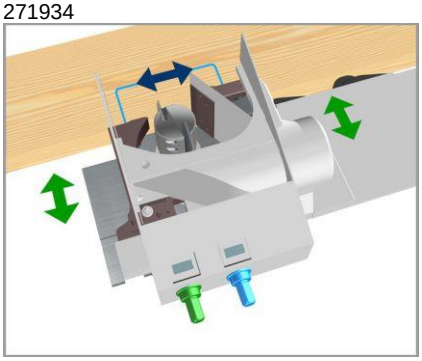
4114508

PowerLock - tool holder

4112902
Revolution speed — 12000 rpm

67215*
Tool cutting circle — 93 - 200 mm
Tool cutting circle for straight planer heads max. — 163 mm

271934



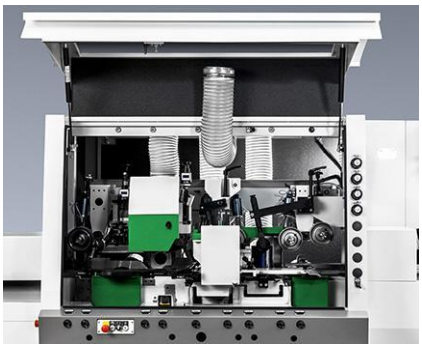
Vario hood (2 axes)
Central adjustment (2 axes) of pressure and guiding elements in front of and after left tool holder including electronic digital display.

2153014*

Maximum profile depth	35 mm

229302

Setting range axial	55 mm



Quick disconnect dust extraction hose
Your advantage:
- Reduced setup time and greater safety due to improved access to the left spindle and the area in front of it

217311*

Pressure shoe in front of left tool holder, incl. 2 lateral pressure rollers, spring-mounted

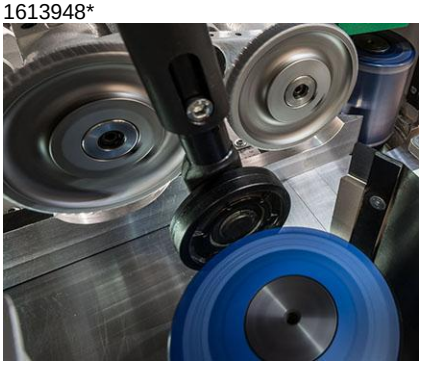
30236*

Setting range of the feed rollers opposite left tool holder, axial 35 mm

30237

Extension of the pendulum arbor opposite the left tool holders to 150 mm

1613948*



Pressure roller from above located opposite the left spindle pivoting out of the way, spring loaded.

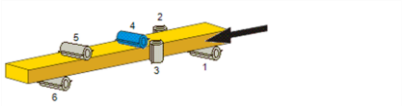
1635667

Axial CNC-controlled adjustment and positioning of tool holders in combination with Memory - Function or with PowerCom.

1635668

Radial CNC-controlled adjustment and positioning of tool holders in combination with Memory - Function or the PowerCom.

4. spindle



First horizontal top spindle

9112141
Motor — 22 KW (30 HP)

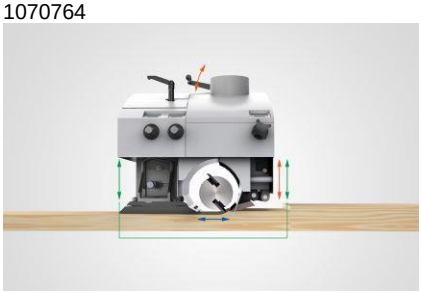
4114508

PowerLock - tool holder

4112902
Revolution speed — 12000 rpm

354646*
Tool cutting circle — 93 - 200 mm
Tool cutting circle for planer heads max. — 180 mm

1070764

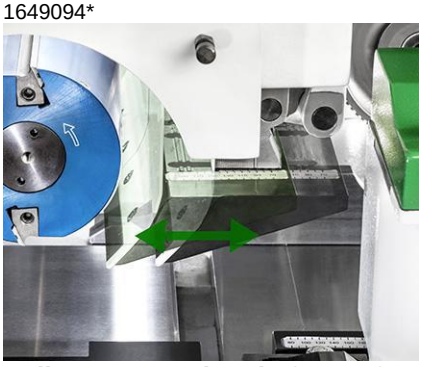


Vario hood (2 axes)
Central adjustment of pressure and guiding elements in front of and after top tool holder including electronic digital display.
Pressure element in front and guide after top tool holder to be adjustable jointy as well as separately.

2153014*
Maximum profile depth — 35 mm

30269*
Adjustment range axial — 40 mm

1649094*



Split pressure shoe in front of top spindle with horizontal plane of adjustment to the tool cutting circle and receding from the tool, spring loaded.
Your advantages:
- Precise positioning to the tool diameter for ideal control of workpieces
- No need to change the chipbreaker shoe

1635667

Axial CNC-controlled adjustment and positioning of tool holders in combination with Memory - Function or with PowerCom.

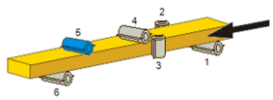
1635668

Radial CNC-controlled adjustment and positioning of tool holders in combination with Memory - Function or the PowerCom.

1101236*

Top spindle prepared for subsequent attachement of the cassette system.

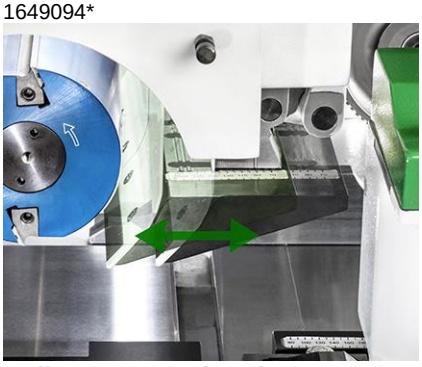
5. spindle



Second horizontal top spindle

522234 Motor		30 KW (40 HP)
4114508  PowerLock - tool holder		
4112902 Revolution speed		12000 rpm
354646* Tool cutting circle Tool cutting circle for planer heads max.		93 - 200 mm 180 mm
1070764  Vario hood (2 axes) Central adjustment of pressure and guiding elements in front of and after top tool holder including electronic digital display. Pressure element in front and guide after top tool holder to be adjustable jointy as well as separately.		
2153014* Maximum profile depth		35 mm
30269* Adjustment range axial		40 mm

1649094*



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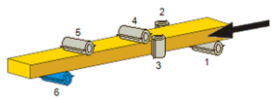
1635668

Radial CNC-controlled adjustment and positioning of tool holders in combination with Memory - Function or the PowerCom.

1101236*

Top spindle prepared for subsequent attachement of the cassette system.

6. spindle



Second horizontal bottom spindle

9112141
Motor 22 KW (30 HP)

4114508

PowerLock - tool holder

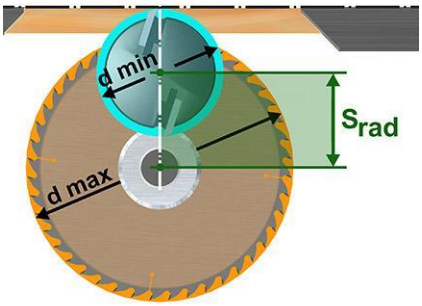
4112902
Revolution speed 12000 rpm

4145159*
Tool cutting circle 93 - 225mm

3073844*
Maximum profile depth 15 mm

30269*
Adjustment range axial 40 mm

1831014*



Radial range of adjustment

Planing:

min. tool diameter to table surface	93 mm
max. profile depth (with tool diameter 225 mm)	15 mm
max. knife height above the table surface and behind fence line	10 mm

Sawing (only in connection with timber feed):

max. saw diameter (225 mm) below table surface	
max. depth of cut with sawblade diam. 225 mm	10 mm
and flange diam. 100mm	53 mm
max. depth of cut with sawblade diam. 225 mm	
and flange diam. 90mm	58 mm

1635667

Axial CNC-controlled adjustment and positioning of tool holders in combination with Memory - Function or with PowerCom.

1635668

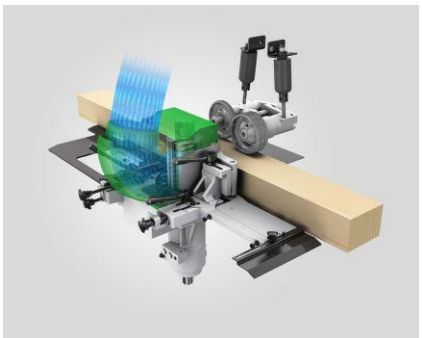
Radial CNC-controlled adjustment and positioning of tool holders in combination with Memory - Function or the PowerCom.

Spindles in general

118308*

All spindles with highly concentric running.

Spindles for spindle speed 12000 rpm and 4000-12000 rpm incl. HCB ball bearing for maximum requirements of speed and quality.



Optimized flow of dust and wood chips due to aerodynamic hood design
Your advantages:
- Energy savings due to reduced performance requirements from the dust extraction system
- Reduced noise emission

1096355

Basic equipment for PowerLock.

Air volume requirement per spindle with hose diameter 160 mm and air speed of 23 - 26 m/sec.	1680 - 1920 m³/h

6 **Temperature monitoring of spindle bearing**
Spindle housing and bearing is permanently monitored by temperature sensors. In the case of reaching critical temperature levels PowerCom issues warning messages. For temperatures above a certain value PowerCom stops the spindle and feed motors immediately.

Benefits:
- Early detection of critical bearing temperatures
- Unscheduled down-times will be avoided
- Maintenance improvement
- Avoidance of damages made on spindles and other machine parts

Feed system

1830576*
Feed speed electronically variable incl.brake — 5 - 40 m/min.

1004237
Motor — 7 KW (9.5 HP)

1155635*

Feed roller in front of 1st bottom spindle pneumatically moved "up-down"

All feed rollers with quick clamping
Your advantages:
- Quick positioning of feed roller tracking
- Quicker exchange of feed rollers

517232*

Durofer pointed tooth rollers self-cleaning with depth limitation

2 Pendulum shaft extended in length to 220 mm incl. one additional feed roller.

256409
CNC-controlled adjustment and positioning of feed up/down in combination with Memory - Function or the PowerCom.

Machine electric

1103833
6 Operating voltage (single) 460 Volt, 60 Cycles according to US regulations

All spindle and feed drives with energy efficient IE 3 motors.
Conforming to the latest international regulations.
Your advantages:
- Energy savings
- Full approval by controlling authorities

1938622*
Electric version according to DIN VDE 0113,
electric equipment of industrial machines EN60204, IEC-204-1.
Additional electrical regulations are not taken into consideration.
By using frequency-controlled drives in our machines, it is not possible to operate them on residual current circuit-breakers (RCDs).
In the building, the mains cable must be earth and short-circuit proof up to our control cabinet (e.g. by using single-wire NYY cables or a corresponding mechanically protected installation).
The property insurer must be informed if the machine is operated without a residual current circuit breaker, and associated technical measures may be demanded.
See also VDMA position paper:
Use of electric equipment of machines
according to DIN EN 60204-1 (VDE 0113-1):2007-06
in operating locations at risk from fire according to
DIN VDE 0100-482 (VDE 0100-482):2003-06
Release of the DKE/K 225 and DKE/UK 221.2
The relevant country-specific regulations must be adhered to and observed.
It is the users responsibility to ensure that the main power supply to the moulder is specified according to the maximum fused load rating.

EMC
Limit value class A in accordance with DIN EN55011: 2011-04
(Installation of machine in industrial environment)

Moulder prepared for electrical connection of a lateral chain feeder
including two plug-in connections (UL certified).

1227704
Remote Lock out / Tag out

82146

Switch cabinet and operating panel separate from machine.
Distance switch cabinet - machine: 2.5 m
Distance operating panel - control cabinet: 3.5 m

Machine base, tables and fences

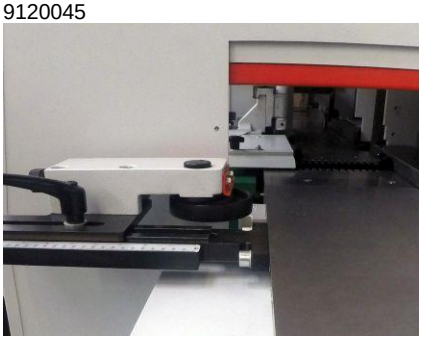
1155930*
Straightening table, 2 m long
(incl. edge jointing fence)

1001927
MarathonPowerCoating for machine tables and fences
(excluding infeed table and special table plates).
Special coating for table plates and fences to prevent high wear.

472393

Automatic lubricant pump to remove resin from machine table, incl.
5 liters lubricant.

9120045



Lateral pressure roller at the infeed table, spring-mounted

108573

One driven roller in the machine table, hardened 210 mm wide

229816

One driven roller in the outfeed table, 210 mm wide
respectively in front of universal tool holder (of existing), hardened

1227703

Straight edge, # 00 603 311

Pressure elements and guides

KPT 2195464

Guiding fence after the left vertical spindle 8 mm thick, pneumatically moved to the workpiece width. Replaces standard guiding fences. For moulding production the fence can be manually set to the workpiece width and clamped in position.

Machine operation

1354975

PowerCom Plus

- Profile and tool data management software
- Settings can be calculated or saved. These settings are displayed on the electronic double readouts.
- Touch-screen function for graphic support during machine operation
- 10,000 profile data sets and tool memory locations per PowerCom package
- Profile graphics can be saved with the profile data (saving profile graphics reduces the number of savable profile data sets and tool storage locations).
- Softwaremodul ServiceControl to support maintenance
- Integrated network card for interfacing with OptiControl or other PCs
- USB stick for manual data backup- USB port for manual data data backup
- Acquisition of production and machine data, including length counter
- Indicator of operating hours
- User management with password function
- Logging of production stoppages (see annex for detailed description)

256347

Basic equipment for installation of the CNC-controlled adjustment and positioning.

71445*

Central position of lubrication points at the front side of the machine

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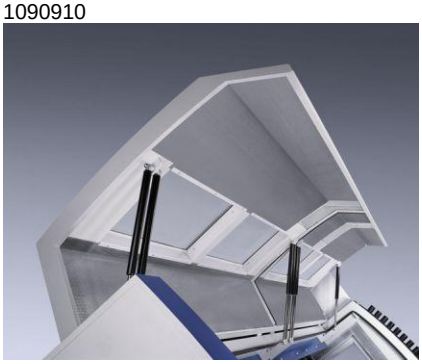
Factory address: Weinigstraße 2/4, 97941 Tauberbischofsheim, P.O. Box 1440, 97934 Tauberbischofsheim, Germany
Phone +49 9341 86-0, Fax +49 9341 7080, Email info@weinig.com, www.weinig.com

Safety and noise protection

1064637*
Machine with spindle brakes
Electromagnetic interlocking of the safety enclosure
(the machine can only be opened after the standstill of the spindles, approx. 15 seconds) and interior light inside the the safety enclosure.

5104407*
Full safety cladding

1090910



Improved sound insulation of completely enclosed safety shell.
Design thickness of sound protection elements approx. 85 mm, multilayered desgin, surfache weight approx. 25kg/m², with perforated metal plate cover.
Conditional on structure and number of spindles an effective noise reduction up to 15 dB (A) will be achieved.
An appropriate installation of the shell is a prerequisite. Less reduction at the machine feed and outfeed, also when using feed devices, anti kick-back devices, automatic straightening aids, etc.
Customer shall provide 1 - 2 help mates for assembling the improved completely enclosed sound insulation shell!

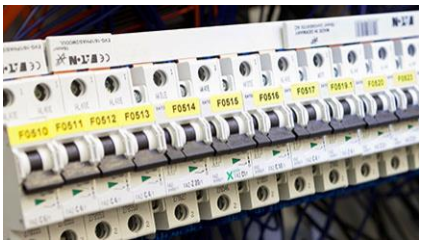
1005911
6 Cost component per spindle for sound enclosure

1478622*
One interior light in the safety hood.

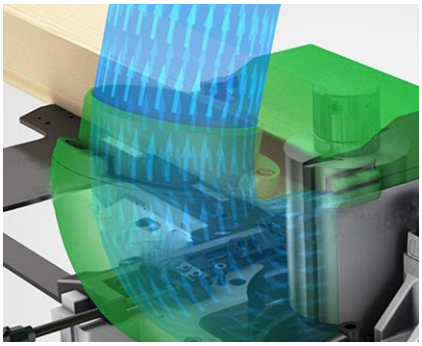
1463036
Package Light Plus
to improve the interior illumination of the machine.
Two additional interior lights in the safety hood

For splitting works, e.g. sawing or multiple profiling, you require appropriate protection devices. Please contact Weinig.

Connections



Total connection value	ca. 117 KW (ca. 244 HP) ca. 187 Ampere ca. 433 KVA
Operating pressure	6 bar
Nominal pressure	8 bar



Suction diameter per spindle	160 mm
Total air requirement m³/h	ca. 10080 - 11520
Air speed	ca. 23 - 26 m/s
Low pressure	
with 23 m/s	ca. 900 - 1400 Pa
with 26 m/s	ca. 1100 - 1800 Pa