RONDAMAT-SERIES

WEINIG tool grinding machines

From the raw blank to a perfectly ground tool







WEINIG offers more

WEINIG's successful path in wood processing is characterized by listening to our customers and the demands of the market place. Born from many years of experience, WEINIG's R & D department never fails to create new practical solutions for industry and small businesses in close collaboration with our customers. Whoever buys a WEINIG machine today knows that they are optimally equipped for the future of their business.

100% quality – WEINIG machines must satisfy the highest standards. That is why the greatest care in development and manufacturing is a traditional virtue at WEINIG. You benefit from this by the long service life of your valuable investment.

Reliability – The availability of a machine determines how profitable your business is. WEINIG systems are known for their high standard. More than 80,000 machines from WEINIG are operating around the globe to the utmost satisfaction of our customers.

Expert advice – Whether you need the expertise of WEINIG Concept for turn-key solutions or the know-how of a WEINIG expert at your door – you can always rely on our committed sales team. Ultimately you will have a customized solution that offers you maximum value for your investment.

Everything from a single source – With WEINIG you have an experienced full service provider as your partner. From rough cutting to stacking, from a stand-alone machine to a fully automated turnkey production line. Including, of course, a comprehensive service package.

Service – Safety is reassuring. If worse comes to worst, our trained service engineers will be quickly on site. WEINIG maintains a unique closely woven service network worldwide. A mesh so fine that no customer can fall through!

The WEINIG ExpoCenter

In our ExpoCenter we can show you what top technology can really do for you. Here you can experience our





The WEINIG Grinding System: A precise response to meet all demands

WEINIG's Rondamat Series includes a full range of tool grinders specially customized to meet individual needs and conditions. From manual units through to fully automatic machines. All the models display exceptional precision. And they are all built to the same high quality standard as the WEINIG moulders. This explains, why a lot of tool sharpening services now work with WEINIG Rondamats.

Regardless of whether you work hard or softwoods, chipboard, MDF or plastic – you can always rely on a Rondamat. Using the appropriate grinding wheels you can produce and sharpen HSS, stellite or carbide knives.

Regrinding tools has been a part of our business for decades

Regrinding of plane knives in the head



Regrinding of finger joint tools



Creating and regrinding of profile knives



Subject to technical modifications. Statements and pictures in this brochure may also include optional extras which are not included in the standard serial equipment. Some of the photos show the machine with the protective covers removed.

Rondamat 980: The fully automatic grinding machine for planing cutter heads

The surface quality of the final product is decided in the moment that the cutting edge meets the work piece. That is why it is essential to have tools that are always optimally prepared and ready to regrind whenever necessary. The Rondamat 980 is a very efficient solution for this problem. With its fully automatic operation, all you need to do is clamp the tool onto the grinding machine and enter the processing parameters using the control terminal. The Rondamat 980 does the rest – all by itself.

Your benefits

- Perfect results when regrinding straight knives in conventional, Hydro- or PowerLock cutter heads
- Regrind finger jointing tools and brazed tools with the optional "Solid cutter package"
- Fully automatic operation after setting up the machine
- Number of grinding circulations and removal freely programmable
- Direct input of the processing parameters via control terminal
- fully automatic dividing head for up to 36 teeth



The most important technical data:

Working width max. 330 mm 460 mm - extended (optional) - in conjunction with PowerLock 322 mm Tool diameter min. / max. 100 / 300 mm 100 / 250 mm - in conjunction with PowerLock - extended (optional) 140 / 340 mm Tool weight max. 100 kg -in conjunction with PowerLock 80 kg mounting arbor diameter by choice fully automatic dividing head, number of knifes 1 - 36 Back clearance angle 15 - 35°

Grinding wheel diameter

- for cutter heads

- for brazed (tipped) tools

Grinding spindle drive motor

Grinding spindle speed

- frequency-controlled (optional)

1.5 kW (2 HP)

4,600 RpM

1,500 - 4,600 RpM

System PowerLock optional "Solid cutter package" optional Total connected load 2 kW (2,7 HP)

1 Control terminal

for easy setup of all processing parameter, such as number of teeth and grinding circulations.

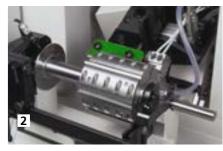
2 Straight knives

are ground in the head. This guarantees best possible run-out accuracy.

3 Solid cutter package

Finger jointing- and brazed tools are ground from the face of the tooth. The independent positioning of the grinding wheel combined with automatic measuring of the outside diameter ensures superior precision.







Rondamat 985: Automatic grinding of wide tools

The Rondamat 985 offers you automatic sharpening of planing cutterheads up to 720 mm wide – regardless of whether it be a conventional cutter head, hydro cutter head or a shaft cutter head. With the optional solid cutter package you can now resharpen finger jointing cutters and brazed (tipped) tools. The basis for the high precision of the machine is the massive spindle carrier. The machine operator must only enter the working parameters and start the machine. While the tool is being sharpened the operator can pursue other activities, because the machine works completely independent.

Your benefits

- High flexibility: ideal for grinding conventional or hydro clamped cutterheads as well as right and left rotating shaft cutterheads
- Reduced setup time and highly accurate tool concentricity due to grinding the knives while clamped in the cutter head
- Unmanned production after setting the machine up
- Quick setup of the machine by an easy to understand touch screen control

- Consistent high quality grinding results
- Time savings due to integrated tool radius measuring device
- Setup time reduction on the planing machine and dimensionally accurate finished products due to known tool dimensions
- Safe and simple lifting of heavy cutterheads with a bore and shaft cutterheads by use of the optional lifting device
- Very safe due to full enclosure



The most important technical data:

Working width max.

Tool diameter

- when grinding cutter heads min. / max.

- when grinding brazed tools min. / max.

Tool weight max.

Fully automatic dividing head, number of teeth Back clearance angle, motorized adjustment

Grinding wheel diameter

Grinding spindle drive motor

Grinding spindle speed, frequency controlled

Self-contained coolant tank with filter Integrated tool radius measuring device

Interior lighting

Full machine enclosure

Tool lifting device "solid cutter package"

Total connected load

1 Fully automatic grinding

The precision guides of the grinding aggregate ensure consistent high quality finish on the knife as well as high concentricity. In addition to this there is a reduction in setup time because the knives are ground in the cutter head.

2 Intuitive operation

The control unit is simple and easy to understand with descriptive graphics so that the machine can be set up quick and safe without errors.

3 Integrated radial tool measuring

Measuring the tool while mounted in the grinding machine results in great time savings on its own. In addition to that, with the low measuring tolerance of 0,01 mm the planing machine can be set up precisely.

720 mm

100 / 310 mm

100 / 350 mm

300 kg

1 - 36

15 - 35° 125 mm

1.5 kW (2 HP)

1,500 - 4,600 RpM

standard

standard

standard

standard

optional

optional

2 kW (2.7 HP)

4 Self-contained coolant tank

The coolant fluid is filtered through fleece paper before returning to the tank for re-use. This greatly reduces the coolant consumption and maintenance requirement.

5 Tool lifting device

With the lifting device it is possible to put heavy tools easily and safely into the machine. This not only saves time but improves the ergonomic setup and safety of the operator.











Rondamat 960:

Do-it-yourself tool grinding

Become independent! Optimum use of the fastest moulders and the most streamlined tool set-up systems can only be obtained if the tools you need are always available and ready to use. Only by producing your own tools you can gain full control over all factors: time, quality and tool costs. The Rondamat 960 enables you to start grinding your tools yourself. You can resharpen straight knives as well as create and resharpen profile knives with a template.

Your benefits

- Precise, quick and independent by producing profile tools according to customer wish
- Supreme profile accuracy by copying the profile from a template
- Reduced setup time on the moulding machine with axialconstant system
- Massive machine table and linear cross roller table for high precision and ease of use
- Solid spindle carrier with precise guides for running concentricity below 0.005 mm
- Grinding spindle with cone adaptor for quick and precisely repeatable grinding wheel change
- Cooling system
- With the optional equipment packages the machine can be customized according to your needs



The most important technical data:

Tool width max., (standard)

- extended (optional)

- in conjunction with PowerLock (optional)

Tool diameter min. / max.

- in conjunction with PowerLock

Tool weight max.

Mounting arbor diameter

Clearance angle

- radial at knife back

- lateral in manual operation

Grinding wheel diameter min. / max.

Grind spindle drive motor

Grinding spindle speed, (standard)

- frequency controlled (optional)

System PowerLock

Total connected load

1 Copying device

with template cross support with axial constant system for profile template.

2 Cooling from above by PVC flexible hoses and from below by the knife rest directly at the grinding point prevents overheating of the knives, even if a great amount of metal is removed. 240 mm 350 mm

322 - 360 mm

100 / 300 mm

250 / 300 mm

80 kg

by choice

10 - 30° 0 - 20°

150 / 225 mm

1.1 kW (1.5 HP)

1,700; 2,000; 2,400; 3,000 RpM

1,500 - 3,000 RpM

optional

2 kW (2.7 HP)

3 Package "Joint stone profiling"

Joint stones can be ground with the aid of a template

4 Package "Straight cutter head grinding, automatic"

Quick and precise automatic resharpening of straight knives in the head, especially with high number of teeth. With automatic dividing head for up to 16 teeth.









Rondamat 1000 CNC: Fully automatic high precision tool grinding

The efficient organization of the work area plays an ever increasing role in optimizing manufacturing processes. Ultimately, the full performance potential of your moulders can only be achieved when the tools are sharpened, measured and available when needed. The Rondamat 1000 CNC grinds and sharpens tools fully automatically according to a CAD drawing created by Moulder Master providing the basis for producing accurate profiles on the moulder. In respect to efficiency and added value, the Rondamat 1000 CNC will raise your tool room to a new level.

Your benefits

- Fully automatic grinding of a profile from a straight knife
 blank
- Fully automatic resharpening of straight and profile knives in the head
- Unmanned production after setting up the machine
- Consistent high quality, independent of operator influences
- Enormous time savings due to automatic import of data from Moulder Master
- High precision due to grinding on the basis of CAD-data
- Manufacturing and storing templates is eliminated
- Graphic display of tools for better clarity and prevention of errors
- Suitable for right and left rotating tools with HSS and carbide knives
- Very safe due to full enclosure
- Independence from tool suppliers and grinding services



The most important technical data:

Tool width max.	360 mm
Tool diameter max.	300 mm
Tool weight max.	50 kg
2 PowerLock-Tool holders	
for one left-handed and one right-handed tool	standard
Back clearance angle	10 - 30°
Lateral clearance angle	0 - 20°
Grinding wheel diameter min. / max.	150 / 200 mm
Grinding spindle drive motor	4 kW (5.5 HP)
Grinding spindle speed, frequency-controlled	1,500 - 4,800 RpN
Full machine enclosure	standard
Automatic measuring of grinding wheel diameter	standard
Grinding spindle with HSK receiver	standard
Grinding wheel magazine for 3 wheels	standard
Self-contained coolant tank with filter	standard
Total connected load	5.5 kW (7.5 HP)

1 Fully automatic grinding

Independent from manual skills, consistent high quality profile knives are produced from a straight blank. The requirement to produce a template is completely eliminated.

2 Management of tool data

All tool data is managed at the centrally located operator terminal. Operating errors are reduced through clear menu guidance and graphic display of the tools.

3 Grinding spindle with HSK receiver

The HSK receiver allows grinding wheels to be changed quickly during the grinding process which reduces the setup time. In addition to this a high degree of tool run out accuracy is ensured.

4 Grinding wheel magazine

The grinding wheel magazine with three holders makes automatic wheel changes possible. With this capability a profile can be completely ground without operator intervention. This reduces idle time and increases operator safety.

5 Self-contained coolant tank

The coolant fluid is filtered through fleece paper before returning to the tank for re-use. This greatly reduces the coolant consumption and maintenance requirement.











All needs supplied by WEINIG: The complete solution for production of mouldings

WEINIG is the leading technology supplier for industrial and small scale processing of solid wood products. Worldwide availability of expansive services combined with economical system solutions make WEINIG the all-around ideal partner for profitable manufacturing. Particularly, when confronted with the challenges of guick delivery times, short production runs and satisfying individual customer requirements, WEINIG shows its competence and ingenuity – not only in reference to machine technology but also in consideration of the complete production infrastructure.

With the WEINIG System for production of mouldings you will meet these daily challenges with ease. The perfect coordination of individual work-steps within the process chain guaranties highest quality and efficient use of resources.

Ideal for companies with

- large variety of profiles
- frequent profile changes
- single order processing
- multiple machines
- in-house tool grinding

Key benefits of the system

- An integrated system from the concept to production
- Shorter throughput times by reducing the number of process steps
- Paper-free production thanks to transfer of data
- Retrieval of existing profiles and tools through management with search functions
- High process security through CAD data
- Minimization of idle time through optimal production preparation

Powermat with PowerCom

The moulder for the most demanding quality requirements with quick setup by using information from Moulder Master and tool measurements from OptiControl Digital.

Tool storage shelves

Thanks to the data base in Moulder Master, tools and knives are managed and allocated to a shelf location for quick retrieval when required.

OptiControl Digital

Digital measuring stand with camera system and touch screen for quick, accu-

rate and comfortable tool measurement.

Rondamat 1000 CNC

Fully automatic Grinding Machine for grinding cutter heads with CAD

Working area with Moulder Master Software for use in production planning to draft profile and tool drawings as well

as to define production requirements.

data from Moulder Master.

Moulder Master: The quickest way from an idea to the finished product

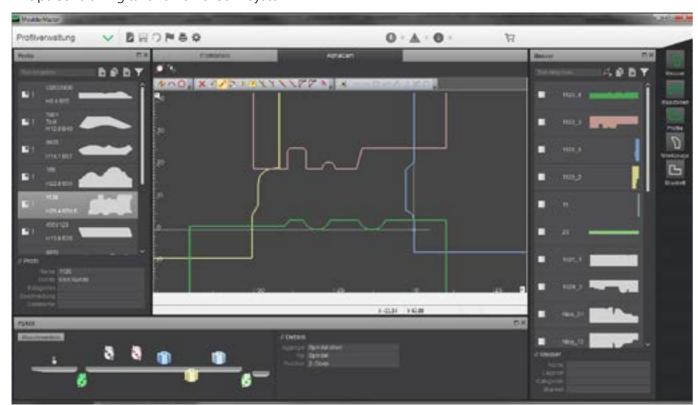
The efficient organization of the working environment plays an ever increasing role in optimizing the manufacturing process. Moulder Master links together all processes which take place prior to production. The necessary information will be sent to the required locations in the tool grinding room or the production area. Errors will be minimized, process security improved and consistent high quality of the end products ensured. In this manner Moulder Master supports efficient and economical manufacturing with the moulder.

Key functions

- Fully integrated 2D CAD for drafting profile and tool contours
- Data bases for management of profiles and tools with search functions
- Integration of moulder data with display of spindle arrangement
- Data exchange with the Rondamat 1000 CNC,
 OptiControl Digital and PowerCom System

Benefits

- One system for preparation of all production needs
- High precision through CAD data
- Efficient management of profiles and tools
- Centralized accumulation of knowledge from various departments
- Automating individual work-steps



OptiControl Digital:

Tool measurements in the wink of an eye

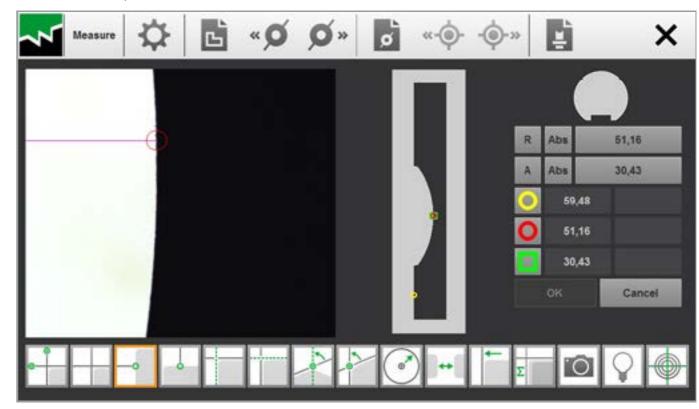
Measuring reference points on the tool is essential for precise setting of the moulder and the production of high quality mouldings. Moulder Master supplies not only the profile and tool data but also the related picture and reference points. The OptiControl Digital tool measuring stand is the perfect enhancement for the tool room requirements and due to the high precision measurements it paves the way for fast and error-free setup of the moulder.

Key functions

- Linking with Moulder Master, Rondamat 1000 CNC and PowerCom
- Help functions for accurate measurements
- Management of adapters required for measuring tools and grinding wheels with various clamping systems
- Measuring of radii and angles for quality control
- Touch screen operation

Benefits

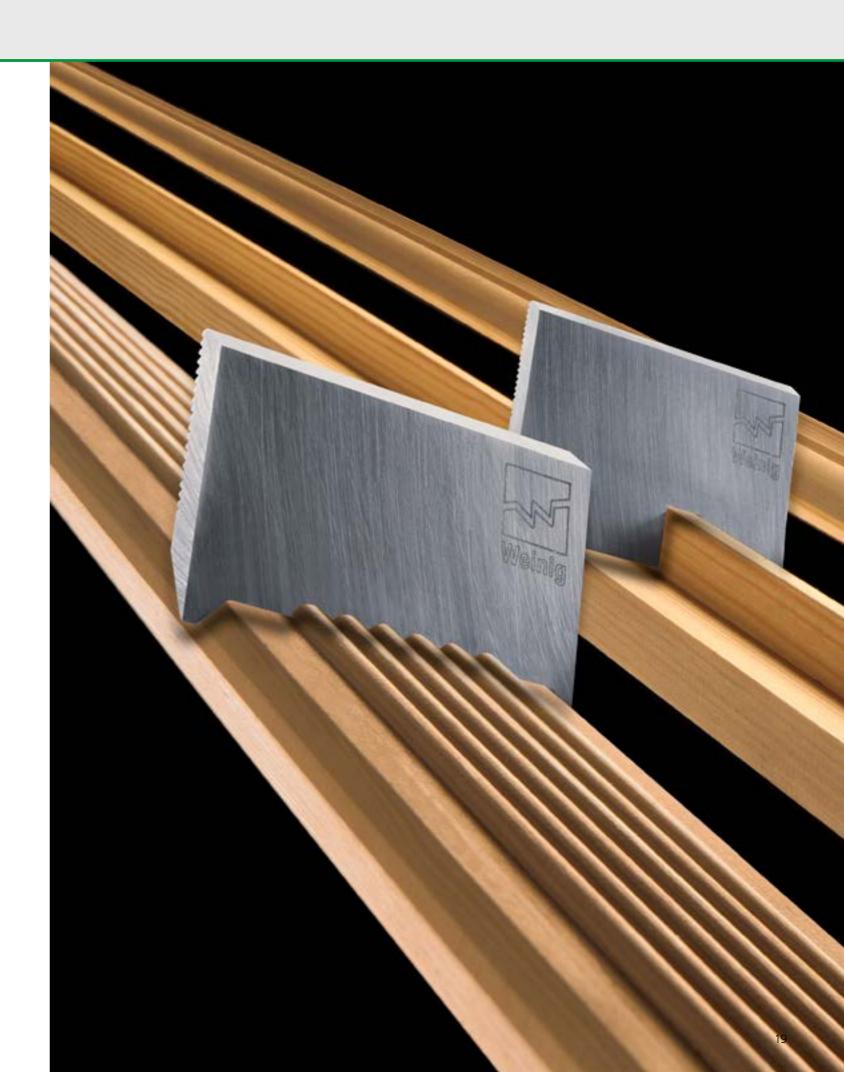
- Touch less measuring of the tool dimensions with a 24 power modern camera system
- Automatic recognition of the knife edge in the camera display
- Prevention of errors due to pictures displaying the profile, tool and reference points
- High accuracy of measurements



Technical data in comparison

	Rondamat 980	Rondamat 985	Rondamat 960	Rondamat 1000 CNC
Straight knive grinding	•	•	•	•
Profile knive grinding	-	-	•	•
Brazed (tipped) tool grinding	0	0	-	-
Manual operation	-	-	•	-
fully automatic operation	•	•	-	•
PowerLock tool clamping	0	0	0	•
Full enclosure of the machine	•	•	-	•
Tool width max. (standard)	330 mm	720 mm	240 mm	360 mm
- extended (optional)	460 mm	-	350 mm	-
- in conjunction with PowerLock	322 mm	-	322 / 360 mm	-
Tool diameter min. / max.	100 / 300 mm	100 / 350 mm	100 / 300 mm	-
- extended (optional)	140 / 340 mm	-	-	-
- in conjunction with PowerLock	100 / 250 mm	-	250 mm / 300 mm	300 mm
Tool weight	100 kg	300 kg	80 kg	-
- in conjunction with PowerLock	80 kg	-	80 kg	50 kg
Grinding wheel diameter	125 / 200 mm	125 mm	150 / 225 mm	150 / 200 mm
Grinding spindle speed	4,600 UpM	-	1,700 - 2,000 - 2,400 - 3,000 RpM	-
- frequency-controlled	1,500 - 4,600 RpM	1,500 - 4,600 RpM	1,500 - 3,000 RpM	1,500 - 4,800 RpM
Total connected load	2 kW (2.7 HP)	2 kW (2.7 HP)	2 kW (2.7 HP)	5.5 kW (7.5 HP)





RONDAMAT-SERIES



Product Unit Profiling

MICHAEL WEINIG AG Weinigstrasse 2/4 97941 Tauberbischofsheim Germany

Phone +49 9341 86-0 Fax +49 9341 7080 info-profiling@weinig.com www.weinig.com