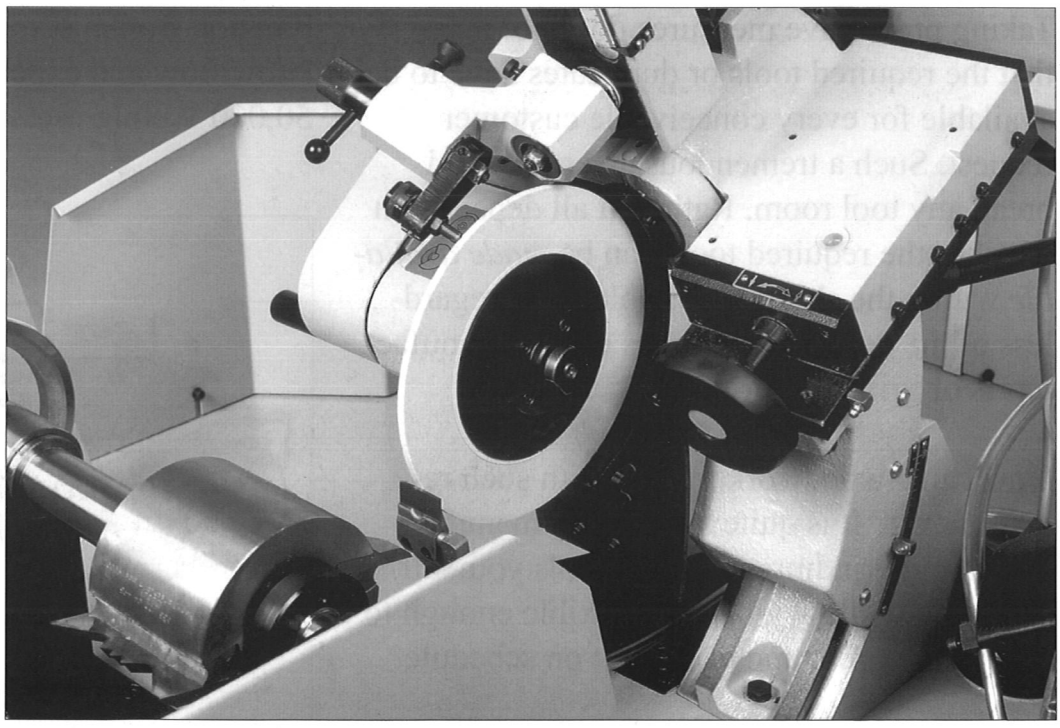
Precision tool grinding

Do it yourself. Precision tool grinding in your own workshop.



Englisch

Profile manufacturer X has to turn down an attractive order for 3,000 linear meters of picture frame mouldings that had to be produced by the next morning. Normally no problem. This time, however, it is a new profile, and new profile knives would have to be ordered for it - which could not be delivered in time.

At the workshop of profile manufacturer Y, an order is being processed for a just-in-time delivery. But then, right in the middle of the run, a tool breaks. Appropriate spare tools are not available. This means the promised delivery date cannot be met.

These situations are annoying. Even more than just annoying if the company loses a customer as a result.

Are such incidents unavoidable? Not at all. Taking reasonable preventive measures can eliminate any time-consuming interruptions of work caused by missing, defective or dull tools, and avoid long waiting times for new tools.

Flexible and independent

Taking preventive measures does not mean that the required tools or duplicates have to be available for every conceivable customer request. Such a tremendous arsenal would break any tool room. Rather, it all depends on whether the required tools can be *made available* within the shortest possible time, regardless of the delivery deadlines of tool manufacturers or grinding services.

How can a woodworker meet with such requirements? It is quite simple: By manufacturing and grinding your own tools yourself. This would allow you to be flexible enough to accept any order and execute it on schedule.

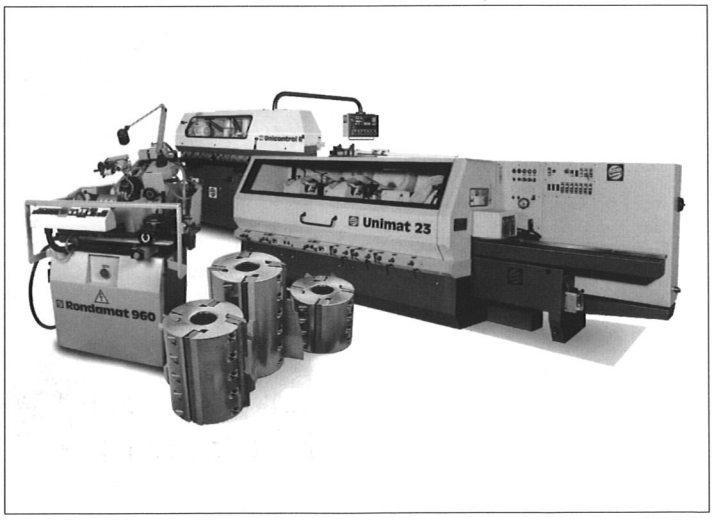
At the same time the quality of your tools is in your own hands. This means you can design them so that they are optimally matched to the specific requirements.

All good things come in threes

The very best moulder can only provide good work if it is equipped with good tools. On the other hand, good tools can only do a good job as long as they are in a good condition.

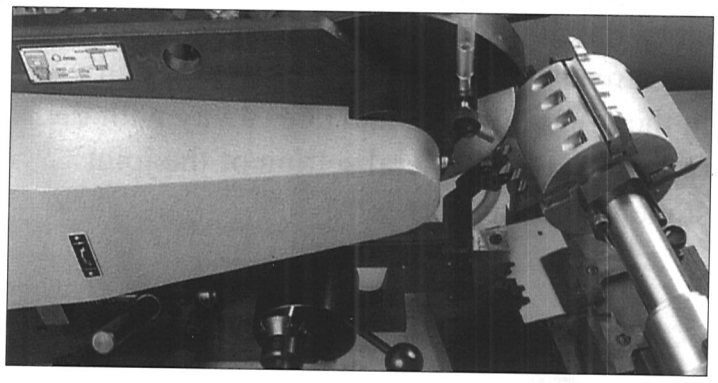
Therefore the tool grinder needs be included with the moulder and the tools as a third element. The better the machines and tools are made to fit, the sooner maximum precision and optimum work results can be achieved.

As a result of this experience Michael Weinig AG in Tauberbischofsheim, Germany, the largest manufacturer of moulders in the world, has also been supplying customers with tool grinders for almost three decades. This gives the woodworker the opportunity to purchase from one source all the components that are crucial to the quality and workmanship of his workpieces. And he can be certain to get an ideal combination with Weinig moulders, Weinig tools and Weinig tool grinders. A combination from a competent partner with the know-how and experience obtained from over 50,000 Weinig users worldwide.



This is just one of the many reasons why more and more woodworkers decide on the more reasonable alternative of making and grinding their profile cutting tools themselves.

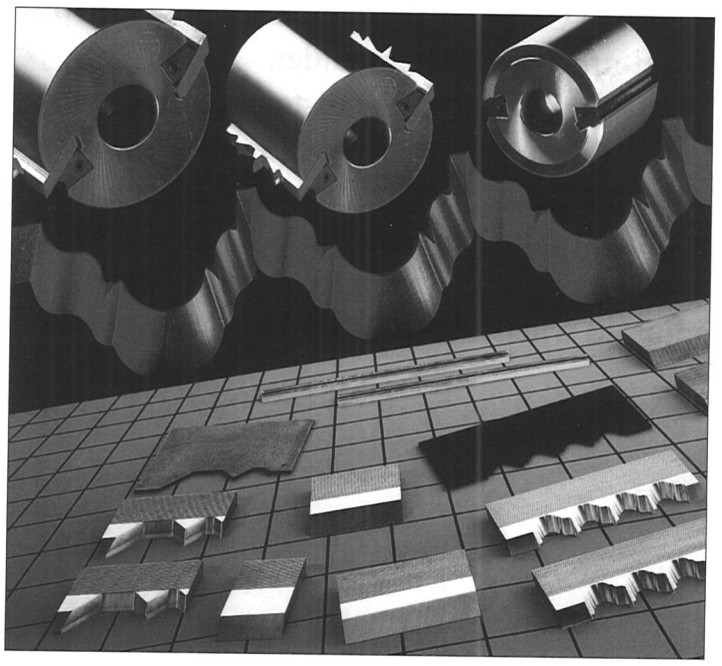
Since Weinig's cutterhead system is flexible and interchangeable, only one initial investment is required. By simply exchanging the knives, the same tool component can be used for all types of mouldings and timber.
Since cutterhead tools, in contrast to milling tools, are ground on the back, the chip removal during each regrinding process is limited to a minimum. The result is a long service life of the tool.



Weinig tools and a Weinig **Rondamat** tool grinder are a way to achieve cost reductions. They pay off fastest where a lot of different profile mouldings are produced and new ones are added all the time.

A round offer

To supplement their cutterheads and tool grinders, Weinig also offers its customers a complete range of accessories and many other useful items. From grinding wheels to template hardening furnaces, precision presetting gauges, jointer presetting devices, right through to electronic systems for measuring, displaying and communicating tool measurements to the moulder. All in all, materials and installations that help to produce moulded workpieces true to profile with first-class surfaces as rationally as possible.



Conclusion

What is the point of having a moulder running at top speeds and the most rational set-up system if you have to wait for the tools? Relying on the grinding service of a tool supplier might lead to unpleasant situations. Particularly when time is an issue and unforeseen events happen. Then orders or even customers may be lost.

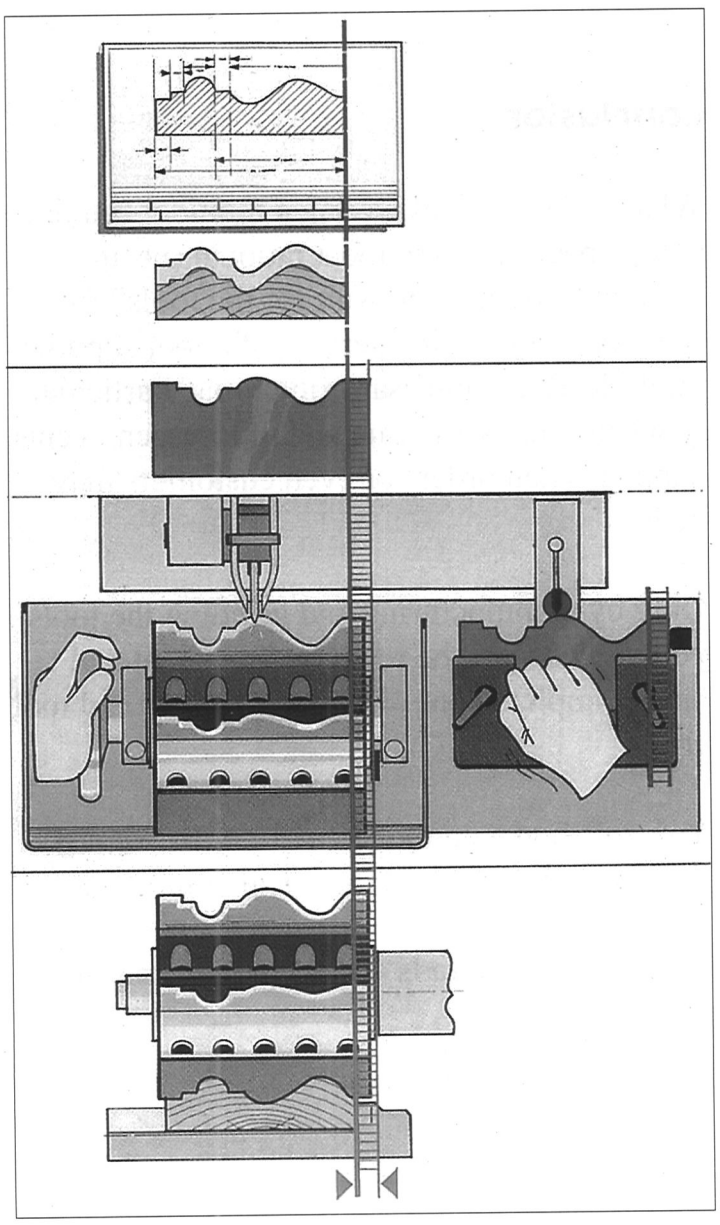
Only by manufacturing and grinding the tools yourself can you be really independent and have complete control of time, quality and tool costs.

You will find a competent partner in Weinig. A partner that can offer an ideal combination:

Moulder, cutterheads and the **Rondamat** tool grinder.

Set-up time cut in half by Axial Constant System

Grinding the knives in the **Rondamat** using the Axial Constant System can save up to 50% of set-up time on the moulder.
With Axial Constant the distance between the tool end face and the front end of the profile is always kept the same. Thus the axial spindle position in the moulder needs only to be set once leaving only the radial spindles to be adjusted whenever tools are exchanged.

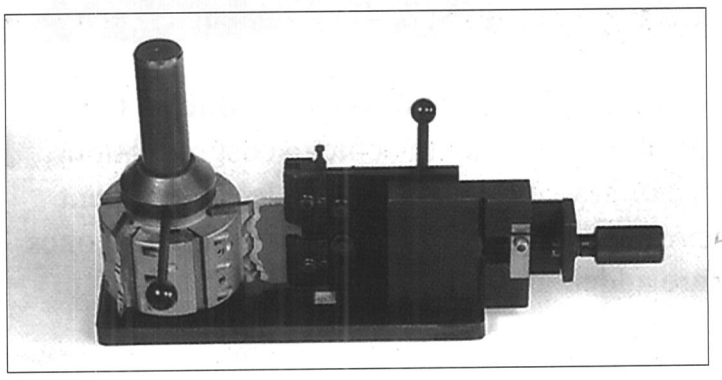


Precision at top speed

When working with high feed speeds perfect surface quality can only be achieved if the tool is jointed. This means the cutters have to be honed with a joint stone at the operating speed of the moulding spindle in the moulder.

This guarantees that all cutting edges in the cutterhead have the same cutting circle diameter and are cutting equally to produce a quality surface finish.

Just like the templates and knife blanks, the joint stones can also be profiled in the **Rondamat**.
Weinig's jointer presetting device saves precious moulder set-up time. On it the joint stone can already be completely profiled and aligned in the grinding room and does away with the time-consuming lateral setting of the joint stone in the moulder.



Cost saving

Tools are a cost factor not to be underestimated. In particular when new tools have to be frequently purchased for the manufacture of different profiles and when adapting them to different materials.

Wide choice, wide fields of application

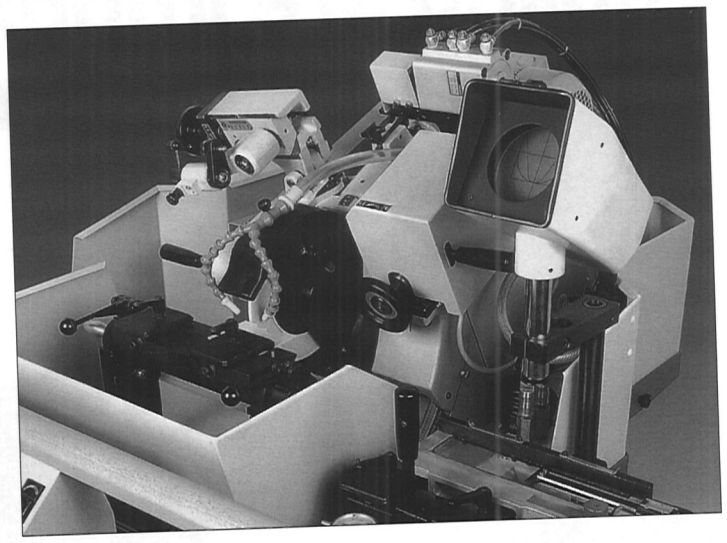
With the **Rondamat** series Weinig offers a range of tool grinders made to measure for the individual demands and conditions, including fully automatic machines for grinding planer knives and profile cutters. All the models have the same extraordinary precision in common. And all have been built according to the same high quality standard as the moulders from the Weinig company. It is certainly not a coincidence that most grinding services today work with Weinig **Rondamats.**

Whether plants process hardwood, softwood, ...erboards or MDF - they can always rely on the **Rondamat**. With the appropriate grinding wheels, HSS cutters as well as stellite and carbide tipped cutters can be produced and ground. The Weinig grinding system covers all the production widths customary in lineal profiling/planing. An extensive range of options allows the **Rondamat** to profile and grind even tools for specific productions such as shank-type tools.

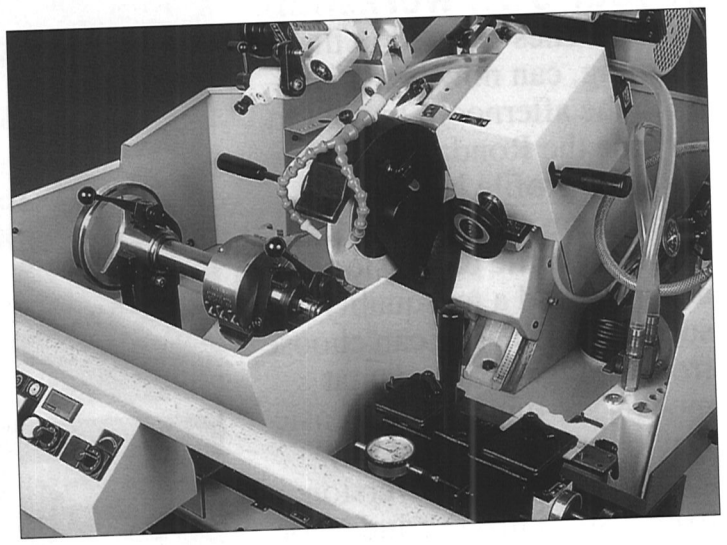
Perfect tools within shortest time

The Weinig **Rondamat** can produce the knives for any desired profile quickly and easily: It begins with a template made according to a drawing or a profile sample in the scale of 1:1 - a matter of a few minutes in the tool grinder. Then, in accordance with this template the straight blanks mounted in the cutterhead are ground and profiled. This guarantees the identical shapes of all cutting edges and an absolute true profile.

The cutter edge geometry can be adapted to different types of manufacture by simply adjusting the grinding wheel. Since the adjusting elements for all grinding angles are

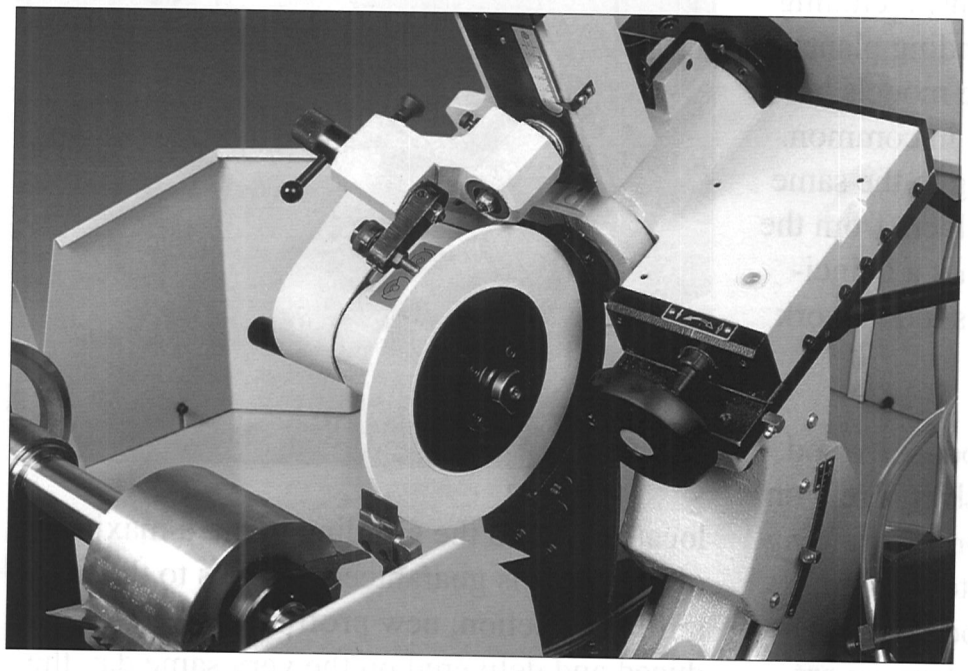


located around the grinding point, a maximum of precision is guaranteed. Thanks to the fast knife production, new profiles can be produced and delivered on the very same day the order is received.



The original template is also used for sharpening the profile knives in the **Rondamat**. This way any deviations in the profiles are eliminated and repeatable accuracy is guaranteed.

A Weinig tool grinder is *a must* if timely production and precision tooling are important to you.

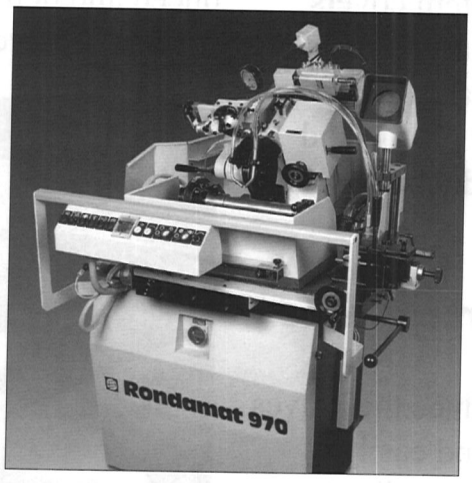


The range of tool grinders:

- Weinig Rondamat 950. The economical model perfect for the small shop that wants to produce and maintain its own knives.
- Weinig Rondamat 960. Designed for production of both high-speed steel and carbide knives to the precision required for higher speed jointed operations.
- Weinig Rondamat 970. This semi-automatic machine not only produces and re-sharpens profile knives but also produces the profile template.
- Weinig Rondamat 912. The numerically controlled grinding machine for planers heads, solid cutters and fingerjoint heads.
- Weinig Rondamat 909. The super accurate, fully automatic grinder for planer heads
- Weinig cutterheads and knife steel.

Precision tool grinding in your own workshop.

New profiles ordered in the morning, can now be delivered in the afternoon. In next to no time the Rondamat produces your profile knives and keeps them sharp so you can achieve profile dimensional accuracy and a top-quality surface finish. You can choose from a range of Rondamat models starting with the basic version up to a technically advanced automatic version; from a specialized grinder for planing knives up to the most versatile grinder for profile knives.



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