



Product information

CHF eco

Sharpening machine for machining the tooth flanks
of TCT circular saw blades

CHF eco

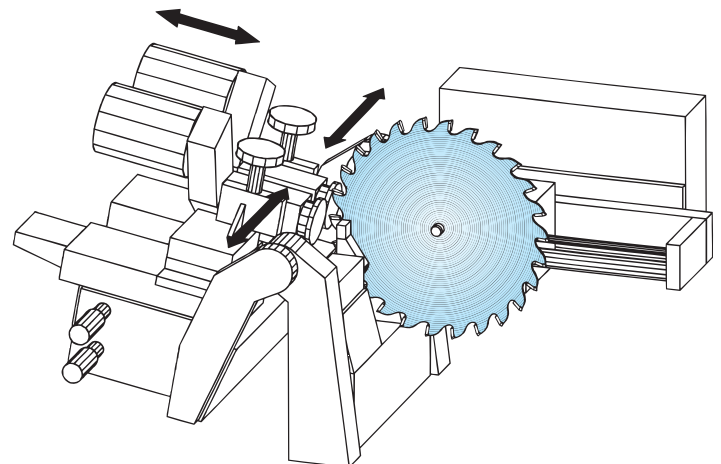
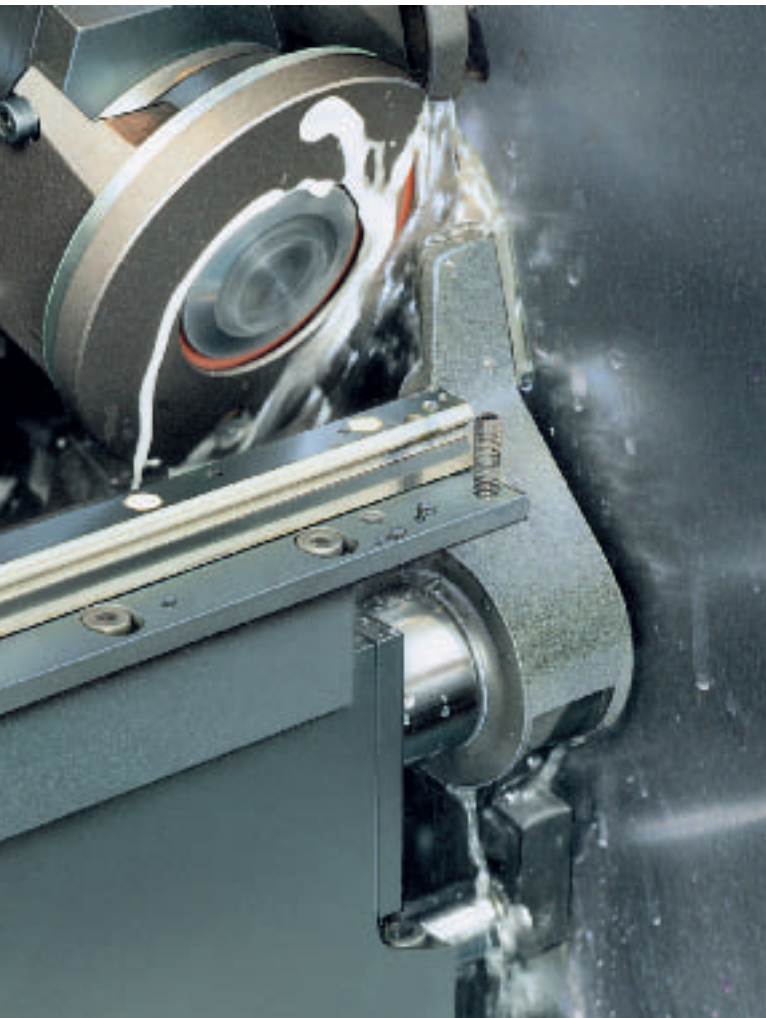
The CHF eco: precision with diverse programs and short grinding times

With this modern machine concept, VOLLMER shows that it is possible to improve not only quality but economic efficiency too when grinding the tooth flanks (sides) of carbide-tipped circular saw blades: thanks to short cycle times and reduced ancillary time, overlaid functions and a wide choice of grinding programs. The grinding results are always excellent. And so is the price-performance ratio of the CHF eco.

Besides the CNC-controlled axes, the VOLLMER PMC multi-processor control provides the ideal basis for all kinds of operating conditions. The software for this was developed by VOLLMER, with all grinding programs already integrated as standard. In addition, further work programs can be used to store and retrieve individual saw blade parameters.



Quick and easy programming and retrieval of individual grinding programs at the control desk with LCD display. The operator is guided by clear-text prompts and kept informed of faults and possible causes. It is even possible to program one saw blade while another is still being machined.



Three CNC axes control the grinding path and infeed movement of both grinding wheels

Useful details and applications

The factors of quality and economy are also critically dependent on how various problems are solved in detail and how versatile these machines are in their application. Special features include:

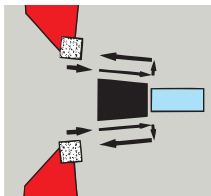
- Ball screw spindles for infeed and grinding movements.
- Additional coverings to protect the grinding saddle and cross slide.
- An optional measuring device for measurement and automatic compensation of grinding wheel wear. Measuring intervals adjustable.
- Optimal handling. The operator has both hands free to move the saw blade into position. The saw positioning slide is clamped via toggle switches.
- Continuous adjustment of grinding feed and grinding path.



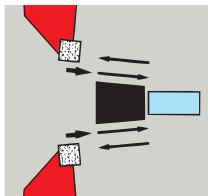
Measuring device for compensation of grinding wheel wear on request

Various integrated grinding programs

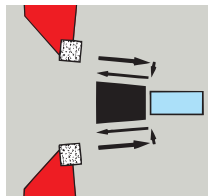
5 grinding programs are already integrated as standard and can be activated at the control desk.



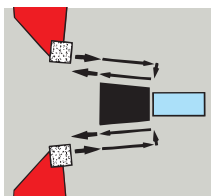
Forward grinding stroke, lift-off and rapid return



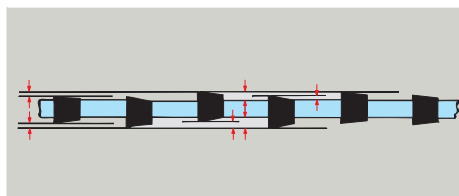
Forward and backward grinding stroke without lift-off



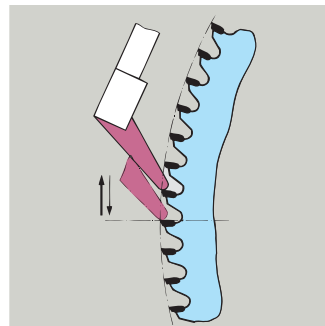
Rapid forward stroke, infeed and return stroke in grinding mode



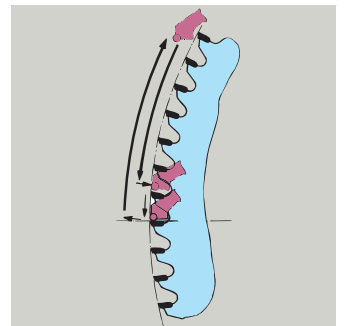
Oscillation grinding with freely selectable number of infeeds and strokes



Program for machining circular saw blades with flank differentials, also with different tooth sequences and flank differentials



Standard:
The feed pawl system for extra-short cycle times and tooth pitches from 8 to 40 mm



Option:
Feed pawl system for saw blades with tooth pitches from 6 to 120 mm. Possibility of machining saw blades with two different tooth pitches

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Technical data at a glance:

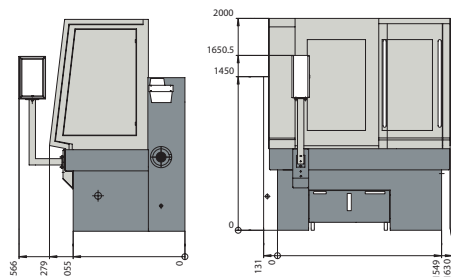
• Circular saws	
Outer diameter	80 to 840 mm
Bore diameter	10 to 220 mm
Blade thickness	up to 8 mm
Tooth pitch (standard)	8 to 40 mm
(Option)	6 to 120 mm
Grinding path (carbide length)	up to 15 mm
Hook angle	-15° to +30°
Radial clearance angle	-4° to +6°
Radial clearance angle	one side up to -8°
Tangential clearance angle	up to +6°
• Grinding wheels	
Outer diameter	80 to 125 mm
Bore diameter	10 to 220 mm
• Grinding speed	0,5 to 15 mm/s
Working speed	up to 15 (12) teeth/min
• Coolant pump delivery rate	50 l/min
Coolant tank capacity	approx. 85 l
• Connected load	approx. 3.0 kVA/2.4 kW
• Weight (incl. covering)	approx. 1,360 kg

Advantages of the CHF eco:

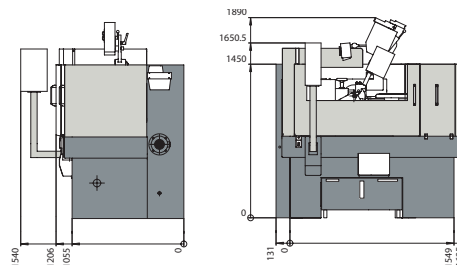
- Short grinding times, reduced ancillary times, excellent grinding results
- Easy to operate (all main functions set and activated at control desk)
- Large number of integrated grinding programs
- Easy loading and unloading of machine

Dimensions

With full enclosure



Without full enclosure



The CHF eco is also available with a splash guard instead of full enclosure for some markets. The technical parameters are the same as for the fully enclosed version.