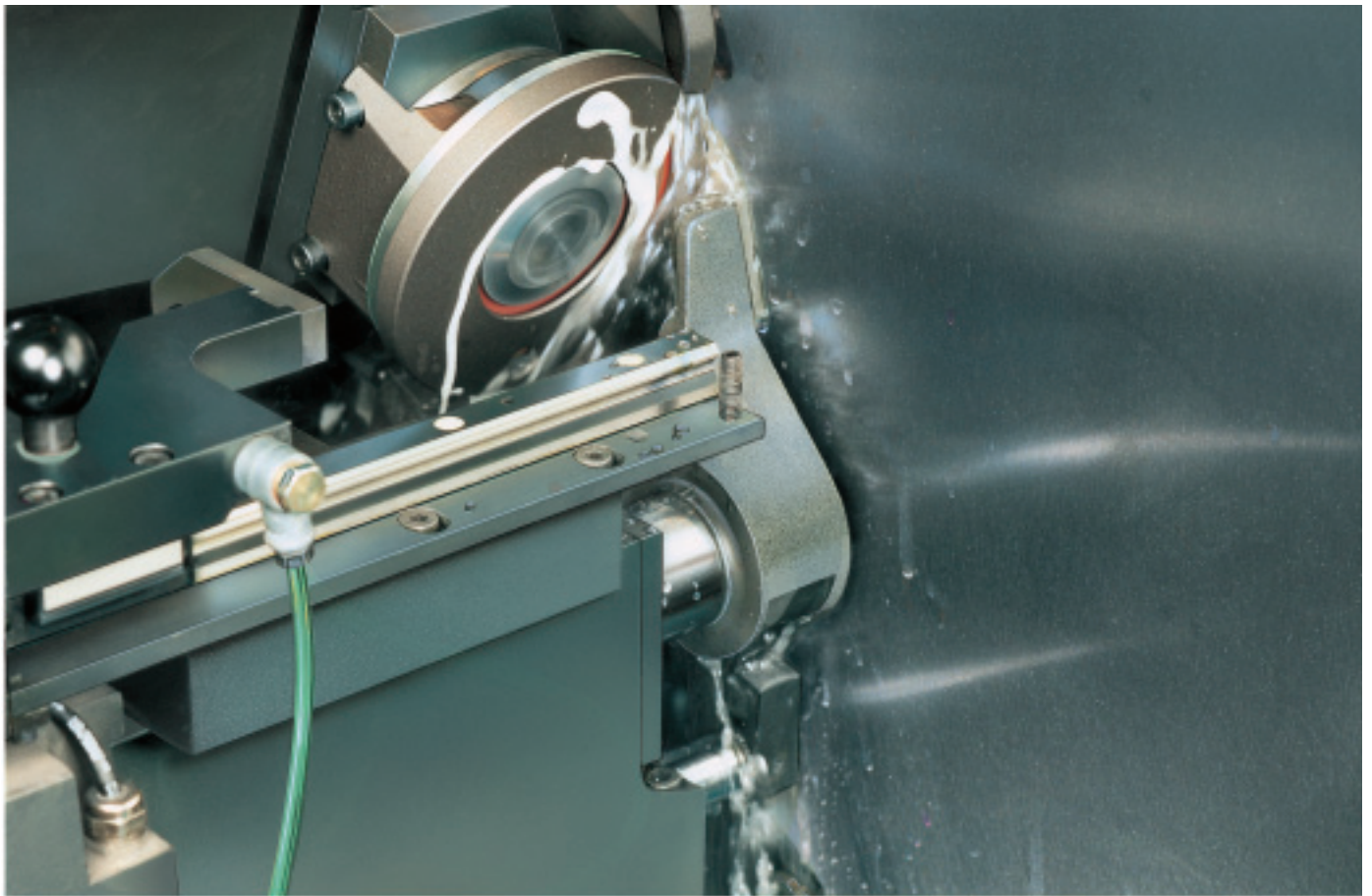


CHF, CEF

**Automatic side grinders for machining
carbide-tipped circular saw blades.**

CNC controlled



Precision plus a wide choice of programs and short grinding times.

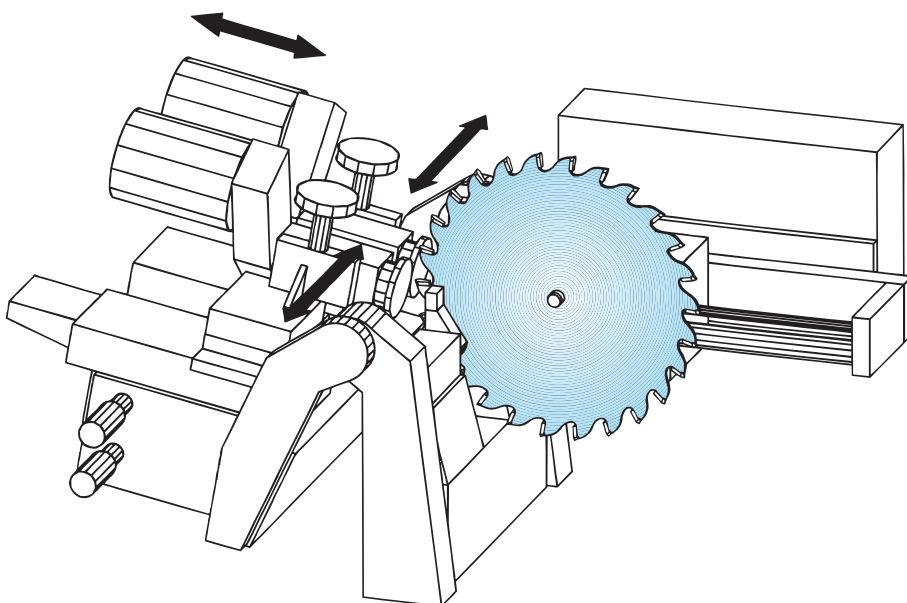
Simple, rapid programming and accessing of stored grinding programs at the control desk with LCD display. The operator benefits from plain language guidance at the screen as well as information on possible causes of operating errors.



With this modern machine concept, Vollmer has highlighted the scope for improvement not only of quality but also of economy in the side grinding of carbide-tipped circular saw blades. This is achieved by reducing cycle times, eliminating downtime, running parallel machine functions, and offering a wide choice of grinding programs. The grinding results achieved are outstanding every time.

Alongside the CNC-controlled axes, the Vollmer PMC microprocessor control offers optimum conditions for a whole range of application conditions. The software was developed in-house by Vollmer.

The grinding programs are already integrated as a standard feature. In addition, individual saw blade parameters can be stored in supplementary work programs and accessed as required. Memory cards are available to permit practically inexhaustible storage capacity.



Three CNC axes control the grinding path and feed movement of the two grinding wheels.



Operation is simplicity itself. Grinding programs are entered and accessed at the control desk. While one saw blade is being machined, it is possible to program in the next one.

The unmistakable design of the full enclosure addresses increasingly stringent calls for safety, noise and emission protection. A central lubrication system is included as standard.

There are 4 versions available:

CHF 100 for saw blade diameters up to 460 mm, with a feed system designed to allow particularly short cycle times.

CHF 210 for saw blade diameters up to 840 mm.

The CEF series of grinding machines come in an outstandingly heavy-duty

design for grinding carbide-tipped saw blades for steel cutting:

CEF 250 for saw blade diameters up to 840 mm, CEF 350 for saw blade diameters up to 1300 mm, both for blade thicknesses up to 14 mm.

This state-of-the-art machine concept offers users the assurance of fast, economical saw blade

machining with impressive grinding results.

All the grinding machines of the series are also available for certain markets with a splash guard instead of the full enclosure. The technical parameters are in compliance with those of the fully enclosed version.

A range of interesting details and application possibilities.

The quality and economy of an installation depends largely on the degree to which it contributes to a range of problems, and on the versatility of the machine. Some of the many features offered on this machine are:

- Ball roller spindles for feed and grinding movements.
- Additional covers to protect the grinding and cross carriages.
- Facility for measurement of grinding wheel wear and for automatic compensation. Measurement intervals are adjustable.
- Optimum handling. The user is left with both hands free to position the saw blade. The grinding carriage is clamped using a knee switch.
- Stepless adjustment of the grinding feed and path.
- Machining of saw blades with two differing saw pitches.



The Vollmer saw blade retainer guarantees precision centering and trouble-free saw blade changeover.



The stable blade clamp can be opened wide to simplify saw blade changeover.



Measurement device for compensation of grinding wheel wear as an optional extra.



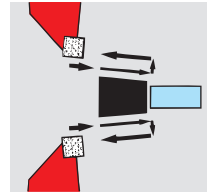
CEF 350: Additional facility for storing tools.



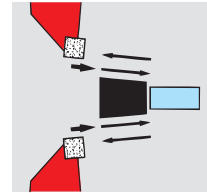
Central lubrication is provided as standard.

Wide range of inclusive grinding programs.

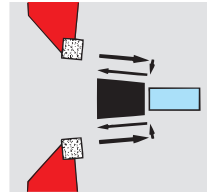
5 grinding programs are already included as a standard feature for simple accessing at the control desk.



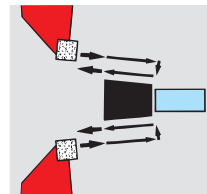
Grinding forward, lift-off and reverse in rapid traverse.



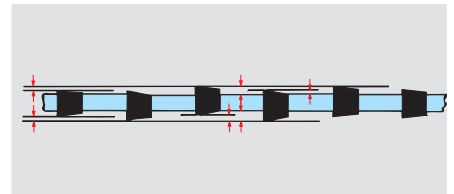
Grinding forward, grinding back without lift-off.



Rapid traverse forward, feed and grinding back.



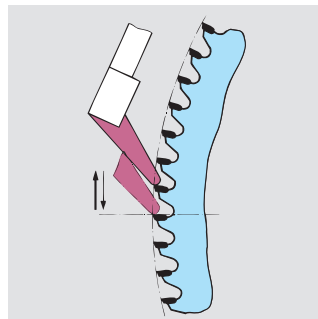
Oscillation grinding with any optional number of feed and lift movements.



Program for machining circular saw blades with flank differences, even where tooth sequences and flank differences vary.

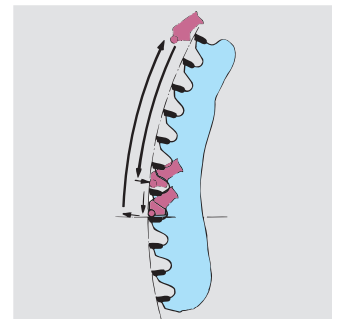
CHF 100

The feed system of the CHF 100 is designed for particularly short cycle times and tooth pitches from 8 to 40 mm. The feed pawl travels back to the next tooth position or can remain stationary at the tooth during the grinding process. This exercises a stabilizing effect, particularly when working with thin saw blades.



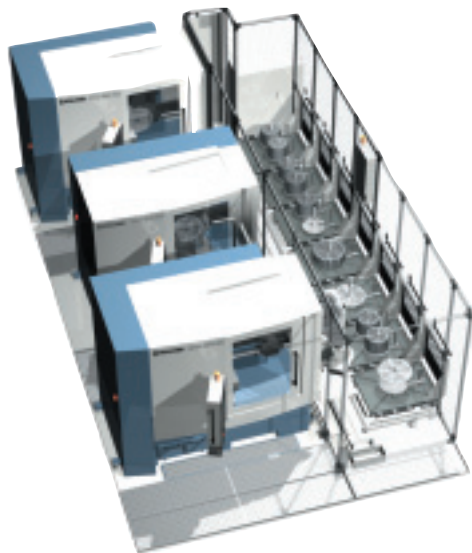
CHF 210, CEF 250/350

Feed system for saw blades with tooth pitches from 6 to 120 mm. Benefit: The feed pawl lifts off during the reverse movement.



The full machine enclosure with its unmistakable design makes a major contribution to enhanced safety at the workplace, offering both noise and emission protection. The generous sliding doors can be opened extremely wide, offering outstanding access to the work area. As the enclosure also opens to allow access from above, it is possible to load saw blades using a crane or other lifting device.





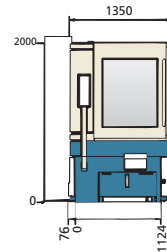
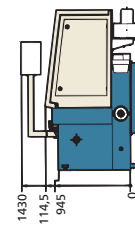
Fully automatic saw production.

In conjunction with a grinding machine CHD 251 R1 for face and top grinding and a handling robot ND, complete unmanned machining of saw blades is possible in multiple shift operation.

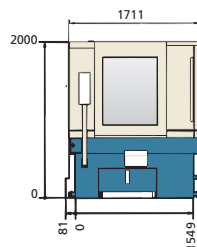
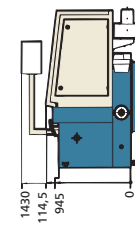
The specifications of the automatic grinding machine at a glance:

	CHF 100	CHF 210	CEF 250 / 350
Circular saws			
Outside dia.	80 to 460 mm	80 to 840 mm	CEF 250 80 to 840 mm CEF 350 80 to 1300 mm
Bore dia.	10 to 105 mm	10 to 105 mm	10 to 220 mm
Blade thickness	up to 8 mm	up to 8 mm	up to 14 mm
Tooth pitch	8 to 40 mm	6 to 120 mm	6 to 120 mm
Grinding path (carbide length)	up to 15 mm	up to 15 mm	up to 30 mm
Hook angle	-15 ° to +30 °	-15 ° to +30 °	-15 ° to +40 °
Radial clearance	-4 ° to +6 °	-4 ° to +6 °	-6 ° to +6 °
Radial clearance angle, one sided	to -8 °	to -8 °	to -10 °
Tangential clearance angle	to +6 °	to +6 °	to + 8 °
Grinding wheels			
Outside dia.	80 to 125 mm	80 to 125 mm	80 to 125 mm
Bore dia.	32 mm	32 mm	32 mm
Grinding speed	0.5 to 15 mm/s	0.5 to 15 mm/s	0.5 to 20 mm/s
Working speed	up to 15 teeth/min	up to 12 teeth/min	up to 12 teeth/min
Connected load	ca. 3 kW/3.9 kVA	ca. 3 kW/3.9 kVA	ca. 3.6 kW/4.6 kVA
Delivery output			
Coolant pump	50 l/min	50 l/min	100 l/min
Capacity of coolant tank	appr. 85 l	appr. 85 l	appr. 120 l
Weight (with full enclosure)	appr. 1050 kg	appr. 1100 kg	CEF 250 appr. 1700 kg CEF 350 appr. 1750 kg

Dimensions



CHF210



CEF250/CEF350

