CMF 300
Machine for the side grinding of TCT circular saw blades
Those who want to produce exact metal cutting saw blades have not only to observe basic parameters such as accuracy of inner saw blade bore, or to apply the appropriate clamping system, but also have to achieve an utmost stable processing and high level of rigidity of the grinding machine.

The unique machine concept of the CMF 300 combines the **cup wheel grinding method with automatic measuring**. The CMF 300 offers extreme rigidity which leads to an excellent surface quality and precise tooth geometries of the machined metal cutting saw blades.

The cup grinding wheel produces flat tooth sides.

The measuring probe, which is standard equipment within the machine, takes all relevant parameters such as saw blade diameter, hook angle, width of saw blade body, tooth side projection, and side clearance angle.

Flat side processing with cup grinding wheel.
The well-known VOLLER user interface stands for maximum operating comfort, a fast machine operator learning process, and efficient handling of the machine. A great variety of available tooth shapes offers a high level of flexibility for the production of metal cutting circular saw blades. The comfortable programming of the machine reduces also the set-up times.

Operating, handling and equipment.

Fast and precise.

2 main spindles with up to 3 grinding wheels and the centrally situated measuring system.

Various grinding programs are included in the standard machine.

Forward grinding, lift-off, and rapid return. Oscillation grinding with selectable amount of in-feed and number of grinding strokes. Machining of circular saw blades with tooth flank differences.
CMF 300

Technical data at a glance:

- Circular saw blades
  - Outer diameter: 200 to 1440 mm
  - Bore Diameter: 16 to 200 mm
  - Blade thickness: up to 15 mm
  - Tooth pitch: 6 to 180 mm
  - Grind path: up to 25 mm

- Grinding angles
  - Hook angle: -35° to +35°
  - Tangential clearance angle: 0° to 10°
  - Radial clearance angle: 0° to 5°

- Grinding wheels
  - Outer diameter: 100 to 125 mm
  - Bore Diameter: 32 mm
  - Peripheral speed: 1,600 to 5,500 RPM

- Coolant tank capacity: approx. 220 l
- Total connected load: approx. 8.7 kVA
- Compressed air connection: 6 to 10 bar
- Weight: approx. 4,500 kg

The highlights:

- Machine for metal cutting circular saw blades that meet the highest demands with regard to precision and cutting edge quality.
- Flat lateral clearance surfaces due to cup grinding wheel method.
- Measuring of the complete tooth geometry.
- Fast and precise machine set-up due to combination of measuring unit and sound measuring device.
- Automatic determination of grinding point at the cup grinding wheel.
- Automatic grinding path recognition / control.
- Machining of radial angles by path processing.
- CNC controlled setting of tangential angles.
- Fully automatic setting and measuring of the tooth geometry.
- Excellent grinding quality with either oil or emulsion as cooling agent.
- Operation control based on Windows XP.
- 9 CNC axes.

Dimensions:

We reserve the right to make design modifications in the interest of technical improvement.