



Creep-Feed Grinding



microCut

Experience the microCut

The microCut model was specifically designed to meet the requirements of profile and creep-feed grinding applications. The modular traveling column design offers a small foot print which can be easily configured into economical production cells frequently used in the turbine industry.

This machine is available in compact standard sizes but special designs with spindle power up to 52 kW are also feasible.

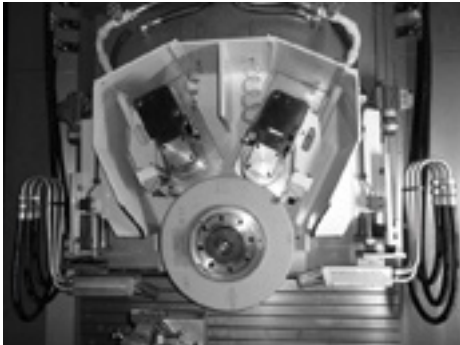
The integration into production lines is achieved through automatic material handling and tool changes. A common solution to reduce non-productive time is to equip the microCut with an index table to allow loading and unloading during machining times.



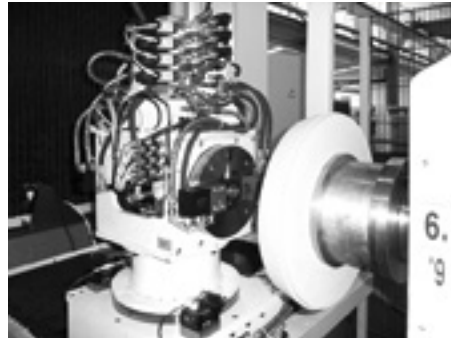
For high-precision applications, dressing of the grinding wheel can be done on the table with a roll dressing unit or via interpolation of feed and cross axes. For high-production grinding, head mounted roll dressing units for intermittent or continuous use are available. For complex grinding tasks, dual head mounted dressing units and tool changers are being used. The microCut is frequently used with Corundum, CBN and diamond grinding wheels.

A trunnion table can be mounted on the machine table to allow the processing of multiple sides of a work piece. With the Sinumerik 840D sl CNC control the microCut can grind complex shapes by interpolating multiple axes.

Proven ELB programming templates are available for most grinding applications. We have application engineers and programmers on staff for every grinding task.



Dual head-mounted roll dressing unit for economical dressing of profiles without changing of diamond rolls. Reduction in set-up time up to 75%.



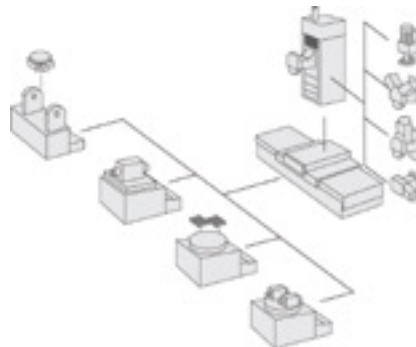
Grinding wheel changing unit to handle wheels up to $\varnothing 500 \times 160$ mm with 6-position magazine.

Benefit Overview

- Compact machine design
- High rate of material removal
- High long-term precision
- Ideal for cell layout
- Optional index table for loading/unloading during grinding
- Automatic tool changer

Design Characteristics

- Modular building block system
- Easy lifting and placing through attached electrical panel
- Linear guideways for all axes are pre-loaded
- Use of vertical and horizontal indexing devices
- Over-sized grinding spindle and wheels for large material removal capacity
- Grinding wheel attachment with cone or HSK
- Optional grinding wheel changer
- Optional automatic loading and unloading of work pieces



Modular building block system



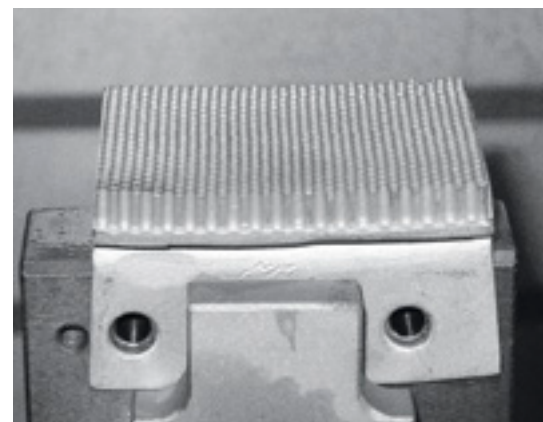
Deep grooves of hydraulic pump rotors are preferably machined with CBN wheels in creep-feed mode



Economical machining of head and base of rotating blades in fixtures or on trunnion tables in creep-feed or reciprocating mode



Interpolating grinding of vane segments in two set-ups. Quick-change of grinding wheels with wheel changer.

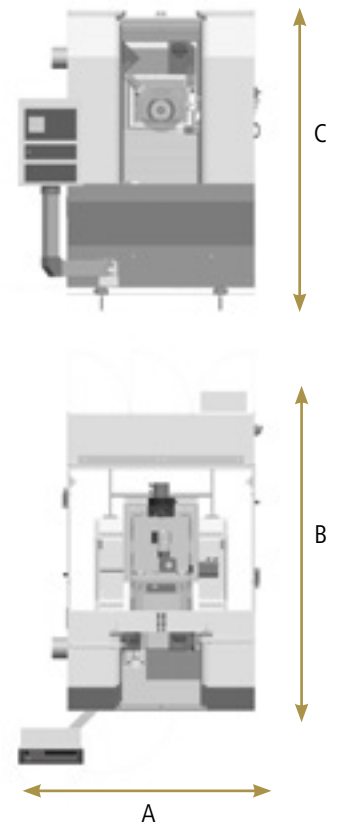


Grinding and de-burring of Honeycomb pattern

microCut	250 S	320	520
Grinding Width (mm)	275	400	600
Grinding Length (mm)	500	700	700
Distance Spindle Center to Table (mm)	400/600	700	400/600
Spindle Power (kW)	22/52	37-52	37-52
Spindle Cone (mm)	60/75	75/90	125, HSK 125
Grinding Wheel (mm)	400 x 100 x 127	500 x 100 x 203.2	500 x 100-160 x 203.2

Dimensions / Weight			
Length A (mm)	1,800	4,750	5,180
Width B (mm)	2,350	4,500	4,800
Height C (mm)	2,870	3,160	3,620
Weight (kg)	9,000	14,000	18,000

All values are approximated and may change depending on selected options.
All information is subject to change.



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