



GRINDING TOOLS

for Universal Machining Centres

Premium grinding tools since 1919
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TYROLIT

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The option of carrying out the grinding process on universal machining centres creates the possibility of having a single workpiece setup to prepare the profile and dimensional accuracy with the milling and turning processes and finalise the high-precision profile and surface requirements in the subsequent grind-finishing operation. Coolant supply for the grinding process is via the tool spindle through the grinding tool itself, or alternatively is directed through the grinding tool holder to the grinding zone. This purpose-built holder facilitates a fast grinding tool change.

Application:

Grinding of gear part in order to reach the surface requirements.



Photo: DMG Mori

+ Customised grinding tools:

For the different quality requirements and performance demands both conventional grinding tools and specifications with superabrasives are available. These grinding tools have been customised for grinding applications on universal machining centres.

+ High profitability: Integrating grinding tools on turning and milling centres means the specified profile and surface requirements can be accomplished in a single setup.





+ System solution: The specification of the grinding tools is optimally adjusted to their use with Tyrolit dressing tools.

+ Easy coolant supply: Defined specifications facilitate a direct coolant supply through the grinding tool into the grinding process. When deploying the grinding tool holder the coolant flows through the holder to the grinding gap.

+ Fast tool change: Using the grinding tool holder enables an easy and fast changeover of various grinding wheel specifications.



Stock range

		Type number	Dimension [mm]	Specification	Note
	Shape 5 grinding wheel	34365826	100x40x32	SU33A80II10PVB1	Ra 0,3-0,5
		34365842	120x30x32	SU33A80IIP11PVB1	
		34365843	140x30x32	SU33A80IIP11PVB1	
		34365838	160x40x50,8	SU33A80II10PVB1	
		34365835	100x40x32	SU33A120HH10PVB1	Ra 0,15-0,3
		34365844	120x30x32	SU33A120HH11PVB1	
		34365846	140x30x32	SU33A120HH11PVB1	
		34365839	160x40x50,8	SU33A120HH10PVB1	
	Cup grinding wheel	34372156	120x40x75	SU33A80II11PVB1	a 0,3-0,5
		34372158	140x40x75	SU33A80II11PVB1	Ra 0,15-0,3
		34372157	120x40x75	SU33A120HH11PVB1	
		34372159	140x40x75	SU33A120HH11PVB1	
	Grinding wheel holder	34363430	120		Holder for cup grinding wheels
		34363472	140		
	Dresser	853704	10x33x5	W3R071004	

Application recommendation:

The grinding wheels are dressed in the machine using diamond dressers.

For the grinding process, the Tyrolit application engineers recommend the following parameters

Cutting speed v_c [m/s]	Infeed [μm]	Dressing overlap ratio for fine grinding operation	Coolant
15-25	5-20	≥ 7	necessary

Contact

For further details please complete the contact form on the Tyrolit website www.tyrolit.com

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