



BCA-ROD Abrasive Grains

Rod-shaped ceramic grains
for unequalled stock removal rates

Tyrolit BCA-ROD Abrasive Grains

With our BCA-ROD grains, Tyrolit defines a new performance level for rod-shaped ceramic abrasive grains. A carefully optimized process and selected raw materials lead to a grain with significantly improved grinding characteristics. The breaking behaviour and self-sharpening properties of the new grain result in unequalled stock removal rates and help in the creation of highly optimized grinding processes.

Physical properties

Colour	Hardness	Specific density	Type
Blue	19 – 21 GPa	>3.86 g/cm ³	Non-seeded Sol-gel

Chemical composition

	Al ₂ O ₃	MgO	Y ₂ O ₃	La ₂ O ₃	CoO	Traces
in %	94 – 96	0.8 – 1.8	0.6 – 1.6	2.2 – 3.2	< 0.2	SiO ₂ , Fe ₂ O ₃ , TiO ₂ , CaO

Applications:

BCA-ROD shows its benefits especially when grinding difficult materials such as titanium and nickel alloys. It is particularly suited for applications with high stock removal rates in bonded abrasives. Potential applications of the grain include gear grinding and creep feed grinding of airfoils. BCA-ROD allows for a gentler handling of diamond dressing tools in comparison to competing ceramic rods.

Grit	Bulk density		Diameter µm	Aspect ratio	Coarse fraction
	Min.	Max. g/cm ³			
S60	1.80	2.10	200 – 300	2.8 – 4.0	0-5%
S90	1.75	2.05	170 – 220	3.0 – 4.2	0-5%
S120	1.70	2.00	135 – 185	3.0 – 4.4	0-5%



Rod-shaped ceramic grains for high stock removal