



CA-ROD Abrasive Grains

Rod-shaped ceramic grains
for high stock removal

TYROLIT CA-ROD Abrasive Grains

CA-ROD is a rod-shaped ceramic alumina abrasive grain with a similar chemical composition as BCA. The special production process allows for shaping abrasive grains with a very high aspect ratio which helps to create an open structure with high porosity. In combination with the unique self-sharpening properties, this results in significantly lower specific grinding energies. The abrasive grain is particularly suited for high stock removal rate applications.

Physical properties

Colour	Hardness	Specific density	Type
White	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	Traces
in %	94 – 96	0.8 – 1.8	0.6 – 1.6	2.2 – 3.2	SiO ₂ , TiO ₂ , CaO

Applications:

The CA-ROD grain is recommended for use in bonded abrasives. It is particularly suitable for applications with high material removal rates - examples include profile grinding, worm grinding, creep feed grinding, hot mill roll grinding and rough grinding.

Grit	Bulk density		Diameter µm	Aspect ratio	Coarse fraction
	Min.	Max. g/cm ³			
T24	1.88	2.08	755 – 805	2.3 – 3.8	0 – 5%
T36	1.84	2.04	495 – 545	2.7 – 4.2	0 – 5%
T46	1.80	2.00	325 – 375	3.1 – 4.9	0 – 5%
T60	1.80	2.00	225 – 275	3.3 – 5.1	0 – 5%
T70	1.80	2.00	205 – 225	3.3 – 5.1	0 – 5%
T80	1.80	2.00	185 – 205	3.3 – 5.1	0 – 5%
T100	1.80	2.00	165 – 185	3.3 – 5.1	0 – 5%



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