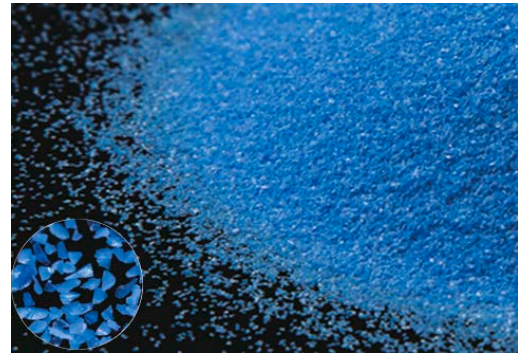


BCA-T Abrasive Grains

Ultra-sharp ceramic grains for aggressive grinding

Tyrolit BCA-T Abrasive Grains

BCA is a blue ceramic alumina abrasive grain. It is a composite material consisting of microstructured alpha alumina and rare earth alumina platelets. The grain combines unique self-sharpening properties with a high hardness and toughness. BCA-T is a special, ultra-sharp version of BCA, which was purposely developed to produce high-end coated abrasives with high stock removal rates.



Ultra-sharp ceramic grains for aggressive grinding

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	Traces
in %	94 – 96	0.8 – 1.8	0.6 – 1.6	2.2 – 3.2	SiO ₂ , TiO ₂ , CoO, CaO

Applications:

Coated abrasives with BCA-T ceramic grain will provide outstanding grinding and finishing performance on a variety of different metals. BCA-T ceramic grains micro-fracture as they grind, reducing heat discoloration on the workpiece while maintaining a high stock removal rate. BCA-T is optimized to perform best in low to medium force applications.

Sieving (modified) and bulk density BCA-T grains

Grit size		Sieving						Bulk density (g/cm ³)
		Sieve 1	Sieve 2	Sieve 3	Sieve 4	Sieve 5	Pan	
24	Sieve No.	14	18	20	25	30	—	1.78 – 1.88
	Residue %	0	0 – 3	30 – 45	≥ 50	0 – 20	≤ 5	
30	Sieve No.	16	20	25	30	35	—	1.77 – 1.87
	Residue %	0	0 – 3	35 – 45	45 – 55	5 – 20	≤ 5	
36	Sieve No.	18	25	30	35	40	—	1.77 – 1.87
	Residue %	0	0 – 5	35 – 50	40 – 55	5 – 20	≤ 5	
40	Sieve No.	25	35	40	45	50	—	1.74 – 1.84
	Residue %	0	25 – 35	35 – 50	20 – 35	5 – 20	≤ 5	
50	Sieve No.	30	40	45	50	60	—	1.70 – 1.80
	Residue %	0	0 – 5	30 – 50	40 – 55	5 – 20	≤ 4	
60	Sieve No.	35	45	50	60	70	—	1.70 – 1.80
	Residue %	0	0 – 3	20 – 35	45 – 65	10 – 25	≤ 5	
80	Sieve No.	45	60	70	80	100	—	1.67 – 1.77
	Residue %	0	0 – 5	25 – 40	30 – 50	5 – 20	≤ 4	
100	Sieve No.	50	70	80	100	120	—	1.65 – 1.75
	Residue %	0	0 – 3	10 – 25	45 – 65	20 – 35	≤ 5	
120	Sieve No.	70	100	120	140	170	—	1.64 – 1.74
	Residue %	0	0 – 7	30 – 50	40 – 55	5 – 20	≤ 4	