

Mono-Abrax MA88

MA88K/MA88KR/MA88BK/MA88BKR For Bonded Abrasive Tools CODE: 4110/4157/4210/4257

Description

MA88K series are monocrystalline corundum abrasive, fused from high purity Bayer Alumina.

MA88K series are characteristic of high toughness and hardness, combined with its unique microfracture of fine crystals surrounding well-grown corundum crystals, creates numerous cutting edges, which leads to high lifetime of grinding wheels and cutting/grinding efficiency.

Physical Properties (Typical)

Mineral Composition	α -Al ₂ O ₃	Melting Point	~2050 °C
Specific Gravity (g/cm ³)	3.98	Loose Packed-Density (g/cm ³)	1.47-2.01
Vickers Hardness	22.1 GPA for 50 gram load		

Chemical Properties (Typical)

Al ₂ O ₃	99.5%	Na ₂ O	0.07%
TiO ₂	0.40%	SiO ₂	0.01%
Fe ₂ O ₃	0.02%		

Application

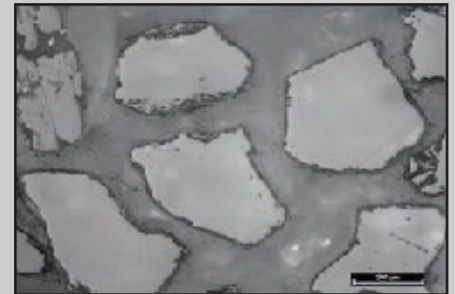
Product	MA88K	MA88BK	MA88KR	MA88BKR
Code	4110	4210	4157	4257
Grain Shape	Weak	Strong	Weak	Strong
Surface Treatment	No		Yes	
PSD Specification	Modified FEPA			
Size	F16-F120			
Application	Vitrified Bond Resin Bond		Resin Bond	

Packing Term

20 KG / Paper bag



Macrostructure of MA88K grains



Microstructure of MA88K grains (SEM)

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Partical Size Distriibution* & Loose Packed Density Specificaiton

Grit Size	Oversize	Coarse Grain	1 st Nominal	2 nd Nominal	Fine Grain	LPD (g/cm ³)	
	Seive 1	Seive 2	Seive 3	Seive 3&4	Seive 5	MA88K/MA88KR	MA88BK/MA88BKR
F16	+10/0	+14/(0-20)	+16/45+	(+16+18)/70+	-20/(0-3)	1.68-1.85	1.85-1.99
F20	+12/0	+16/(0-20)	+18/45+	(+18+20)/70+	-25/(0-3)	1.72-1.88	1.84-1.98
F22	+14/0	+18/(0-20)	+20/45+	(+20+25)/70+	-30/(0-3)	-	-
F24	+16/0	+20/(0-25)	+25/45+	(+25+30)/65+	-35/(0-3)	1.76-1.92	1.85-1.99
F30	+18/0	+25/(0-25)	+30/45+	(+30+35)/65+	-40/(0-3)	1.74-1.90	1.85-1.99
F36	+20/0	+30/(10-35)	+35/45+	(+35+40)/65+	-45/(0-3)	1.71-1.87	1.85-1.99
F40	+25/0	+35/(0-30)	+40/40+	(+40+50)/65+	-50/(0-3)	-	1.85-1.99
F46	+30/0	+40/(0-30)	+45/40+	(+45+50)/65+	-60/(0-3)	1.67-1.87	1.87-2.01
F54	+35/0	+45/(0-30)	+50/40+	(+50+60)/65+	-70/(0-3)	1.67-1.84	1.84-1.98
F60	+40/0	+50/(0-30)	+60/40+	(+60+70)/65+	-80/(0-3)	1.66-1.86	1.82-1.96
F70	+45/0	+60/(0-25)	+70/40+	(+70+80)/65+	-100/(0-3)	1.63-1.80	1.80-1.94
F80	+50/0	+70/(10-35)	+80/-	(+80+100)/40+	-120/(0-3)	1.65-1.81	1.77-1.91
F90	+60/0	+80/(0-20)	+100/40+	(+100+120)/65+	-140/(0-3)	1.60-1.78	1.77-1.91
F100	+70/0	+100/(0-30)	+120/-	(+120+140)/65+	-200/(0-3)	1.59-1.75	1.74-1.88
F120	+80/0	+120/(0-30)	+140/-	(+140+170)/40+	-230/(0-3)	1.56-1.72	1.67-1.81

*Modified FEPA

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