WC-17Co

PRODUCT DESCRIPTION

* Agglomerated & sintered or sintered & crushed gray/black spherical or near-spherical particles, with good fluidity;

* Maximum operating temperature 500℃;

* High hardness, dense coating, wear-resistant particle wear, fretting wear, adhesive wear, erosion wear

* Higher fracture toughness than WC12Co

* Mainly used in aircraft landing gear, extrusion die, wire drawing equipment, paper roll, glass industry, crushing roll, pump sealing parts etc.

Code	PARTICLE SIZE (μm)	CHEMICAL COMPOSITION				PROCESS TYPE	APPARENT DENSITY (g/cm3)	HALL FLOWABILITY (s/50g)
		T.C%	Co%	Fe%	O%			
FB106-2	-53+20	4.7-5.2	16.5-17.5	≤0.5	≤0.5	Sintered & Crushed	≥4	≤25
FB107-5	-45+20	4.7-5.2	16.5-17.5	≤0.5	≤0.5	Sintered & Crushed	≥4	≤25
FB108-3	-45+15	4.7-5.2	16.5-17.5	≤0.5	≤0.5	Sintered & Crushed	≥4	≤25
FA107-2	-53+20	4.7-5.2	16.5-17.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤25
FA108-5	-45+20	4.7-5.2	16.5-17.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤25
FA109-3	-45+15	4.7-5.2	16.5-17.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤25
FA110-6	-45+11	4.7-5.2	16.5-17.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤25
FA111-7	-38+10	4.7-5.2	16.5-17.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤25
FA112-8	-30+10	4.7-5.2	16.5-17.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤25

Recommended Spraying Parameters（HVOF)	
Powder	WC-17Co
Process Type	Agglomerated & Sintered
Particle Size(μm)	45-15
Spraying Gun	JP5000
Gun-barrel（inch)	6
Kerosene（L/h)	22.7
Oxygen（L/min)	944
Carrier Gas（L/min)	7.5
Powder Feed Rate（g/min)	70-100
Spraying Distance（mm)	340-380

Coating Property	
Hardness(HV0.3)	950-1200
Bonding Strength(Mpa)	＞70
Deposition Efficiency(%)	45-55
Porosity(%)	＜1