WC-12Co

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
* High fracture toughness
* Mainly used in mechanical parts, oil and gas equipment, metallurgical rolls, 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%			
FB101-1	-105+45	5.2-5.9	11.5-12.5	≤1	≤0.3	Sintered & Crushed	6.5--7.0	9--11
FB102-2	-53+20	5.2-5.9	11.5-12.5	≤1	≤0.3	Sintered & Crushed	6.2--6.6	10--12
FB103-3	-45+15	5.2-5.9	11.5-12.5	≤1	≤0.3	Sintered & Crushed	5.6-6.2	11--14
FB104-4	-25+5	5.2-5.9	11.5-12.5	≤1	≤0.3	Sintered & Crushed	5.0---5.5	--
FB105-2	-53+20	4.9-5.4	11.5-12.5	≤1	≤0.3	Sintered & Crushed	6.2--6.6	10--12
FA101-1	-105+45	5.2-6.0	11.5-12.5	≤0.15	≤0.2	Agglomerated & Sintered	4.8-5.4	9--12
FA102-2	-53+20	5.2-6.0	11.5-12.5	≤0.15	≤0.2	Agglomerated & Sintered	4.8-5.2	10--13
FA103-3	-45+15	5.2-6.0	11.5-12.5	≤0.15	≤0.2	Agglomerated & Sintered	4.8-5.2	10--14
FA104-4	-25+5	5.2-6.0	11.5-12.5	≤0.15	≤0.2	Agglomerated & Sintered	4.2-4.8	--
FA105-3D	-45+15	4.9-5.4	11.5-12.5	≤0.15	≤0.2	Agglomerated & Sintered	4.7-5.2	10--14
FA106-3	-45+15	5.2-6.0	11.5-12.5	≤0.15	≤0.2	Agglomerated & Sintered	4.1-4.5	10--14

Recommended Spraying Parameters（HVOF)	
Powder	WC-12Co
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)	350-380

Coating Property	
Hardness(HV0.3)	1100-1300
Bonding Strength(Mpa)	＞70
Deposition Efficiency(%)	40-50
Porosity(%)	＜1