WC-10Co-4Cr

PRODUCT DESCRIPTION

* Maximum operating temperature 500℃;

* Hard and dense coating, abrasive wear, corrosion wear, erosion wear;

* Instead of hard chromium plating;

* CoCr bond has higher corrosion resistance and wear resistance than Co bond phase, which is suitable for (moisture) wet corrosion environment.

* Mainly used in aircraft landing gear, gate valve and ball valve, paper rod, hydraulic cylinder, compressor rod, metallurgical rolling series, mechanical parts etc.

Code	PARTICLE SIZE (μm)	CHEMICAL COMPOSITION					PROCESS TYPE	APPARENT DENSITY (g/cm3)	HALL FLOWABILITY (s/50g)
		T.C%	Co%	Cr%	Fe%	O%			
FB109-2	-53+20	5.0-6.0	9.0-10.5	3.0-4.5	≤1.0	≤0.5	Sintered & Crushed	≥4	≤25
FB110-5	-45+20	5.0-6.0	9.0-10.5	3.0-4.5	≤1.0	≤0.5	Sintered & Crushed	≥4	≤25
FB111-3	-45+15	5.0-6.0	9.0-10.5	3.0-4.5	≤1.0	≤0.5	Sintered & Crushed	≥4	≤25
FA113-2	-53+20	5.0-6.0	9.0-10.5	3.0-4.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤18
FA114-5	-45+20	5.0-6.0	9.0-10.5	3.0-4.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤18
FA115-3	-45+15	5.0-6.0	9.0-10.5	3.0-4.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤18
FA116-6	-45+11	5.0-6.0	9.0-10.5	3.0-4.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤18
FA117-7	-38+10	5.0-6.0	9.0-10.5	3.0-4.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤18
FA118-8	-30+10	5.0-6.0	9.0-10.5	3.0-4.5	≤0.15	≤0.5	Agglomerated & Sintered	≥4	≤18

Recommended Spraying Parameters（HVOF)	
Powder	WC-10Co-4Cr
Process Type	Agglomerated & Sintered
Particle Size(μm)	45-15
Spraying Gun	JP5000
Gun-barrel（inch)	6
Kerosene（L/h)	24
Oxygen（L/min)	944
Carrier Gas（L/min)	7.5
Powder Feed Rate（g/min)	70-80
Spraying Distance（mm)	340-380

Coating Property	
Hardness(HV0.3)	1150-1400
Bonding Strength(Mpa)	＞70
Deposition Efficiency(%)	45-55
Porosity(%)	＜1