WC-10Ni

PRODUCT DESCRIPTION

* Agglomerated & sintered gray/black spherical or near-spherical particles, with good flowability.

* The maximum operating temperature is 500℃.

* Hard and dense coating, wear-resistant particle wear, fretting wear, adhesive wear, corrosion wear, erosion wear;

* Non-magnetic material

* Ni has higher corrosion resistance than Co, and is suitable for (moisture) wet corrosion environment;

* Mainly used in oilfield equipment, petrochemical industry, ball valve (oxidation environment), plate valve, offshore equipment and parts etc.

Code	PARTICLE SIZE (μm)	CHEMICAL COMPOSITION				PROCESS TYPE	APPARENT DENSITY (g/cm3)	HALL FLOWABILITY (s/50g)
		T.C%	Ni%	Fe%	O%			
FA119-2	-53+20	5.3-5.8	9.0-11.0	≤0.2	≤0.5	Agglomerated & Sintered	≥4	≤18
FA120-5	-45+20	5.3-5.8	9.0-11.0	≤0.2	≤0.5	Agglomerated & Sintered	≥4	≤18
FA121-3	-45+15	5.3-5.8	9.0-11.0	≤0.2	≤0.5	Agglomerated & Sintered	≥4	≤18
FA122-6	-45+11	5.3-5.8	9.0-11.0	≤0.2	≤0.5	Agglomerated & Sintered	≥4	≤18
FA123-7	-38+10	5.3-5.8	9.0-11.0	≤0.2	≤0.5	Agglomerated & Sintered	≥4	≤18
FA124-8	-30+10	5.3-5.8	9.0-11.0	≤0.2	≤0.5	Agglomerated & Sintered	≥4	≤18

Recommended Spraying Parameters（HVOF)	
Powder	WC-10Ni
Process Type	Agglomerated & Sintered
Particle Size(μm)	45-15
Spraying Gun	JP5000
Gun-barrel（inch)	4
Kerosene（L/h)	24
Oxygen（L/min)	900
Carrier Gas（L/min)	8.5
Powder Feed Rate（g/min)	80-100
Spraying Distance（mm)	340-380

Coating Property	
Hardness(HV0.3)	1050-1250
Bonding Strength(Mpa)	＞70
Deposition Efficiency(%)	45-55
Porosity(%)	＜1