WC-12Ni

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%			
FA125-2	-53+20	5.2-6.0	11.5-12.5	≤0.5	≤0.5	Agglomerated & Sintered	≥3.5	≤18
FA126-5	-45+20	5.2-6.0	11.5-12.5	≤0.5	≤0.5	Agglomerated & Sintered	≥3.5	≤18
FA127-3	-45+15	5.2-6.0	11.5-12.5	≤0.5	≤0.5	Agglomerated & Sintered	≥3.5	≤18
FA128-6	-45+11	5.2-6.0	11.5-12.5	≤0.5	≤0.5	Agglomerated & Sintered	≥3.5	≤18
FA129-7	-38+10	5.2-6.0	11.5-12.5	≤0.5	≤0.5	Agglomerated & Sintered	≥3.5	≤18
FA130-8	-30+10	5.2-6.0	11.5-12.5	≤0.5	≤0.5	Agglomerated & Sintered	≥3.5	≤18

Recommended Spraying Parameters（HVOF)	
Powder	WC-12Ni
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)	70-100
Spraying Distance（mm)	340-380

Coating Property	
Hardness(HV0.3)	1000-1200
Bonding Strength(Mpa)	＞70
Deposition Efficiency(%)	40-50
Porosity(%)	＜1