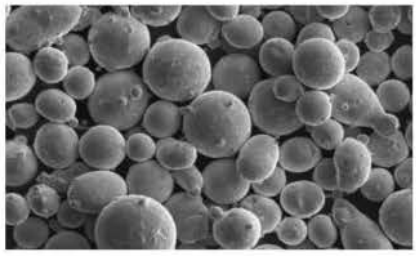
NICKEL BASED SELF-FLUXING ALLOYED POWER

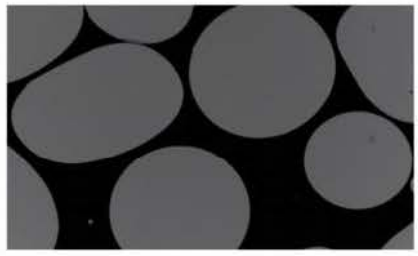
Description

◎ The powder is prepared by gas or water atomization of molten metal alloy that is smelted in a vacuum medium frequency furnace. It is made up of spherical or subsphaeroidal silver-gray particles with strong deoxidization, slagging ability and good matrix wettability.

◎ It is mainly used in plasma transferred arc (PTA), spray welding and High-velocity oxygen-fuel spraying (HVOF) etc.The powder has abrasion resistance, corrosion resistance, high temperature resistance and other properties. So it is suitable for various equipment components' surface strengthening, surface protection and surface repair, and widely used in petroleum, chemical, mining and other industries.

◎ Particle Size: 0.015mm-0.150mm.(Providingpowder with different particle size distribution according to customer's requirement)





Grade & Chemical Composition

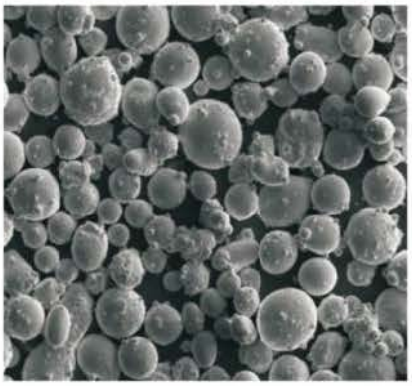
Grade	Chemical Composition							Type of alloy powder
	Ni	Cr	B	Si	C	Fe	O	
ZTCM15101	Bal.	5.0~10.0	1.0~2.0	2.0~3.5	≤0.2	≤4.0	≤0.08	Ni25
ZTCM13302	Bal.	7.0~10.0	1.5~2.5	2.0~3.5	≤0.4	≤4.0	≤0.08	Ni35
ZTCM15204	Bal.	11.0~15.0	2.0~3.0	2.0~3.5	0.3~0.6	≤5.0	≤0.08	Ni45
ZTCM13905	Bal.	14.0~17.0	2.5~4.0	3.5~5.0	0.5~0.9	≤5.0	≤0.08	Ni55
ZTCM13306	Bal.	15.0~20.0	3.0~4.5	3.0~5.0	0.5~1.1	≤5.0	≤0.08	Ni60

Specification& Physical Properties

Spec.	Powder Size (μm)	Flow Rate (s/50g)	Apparent Density (g/cm^3)	Type of alloy powder
ZTCM15101	-53+20	≤20	≥4.0	Ni25
ZTCM13302	-150+45	≤20	≥4.0	Ni35
ZTCM15204	-45+15	≤20	≥4.0	Ni45
ZTCM13905	-106+45	≤20	≥4.0	Ni55
ZTCM13306	-150+45	≤20	≥4.0	Ni60

SUPER ALLOYED POWDER (MCrAlY)

Description



◎ The powder is prepared by gas or water atomization of molten metal alloy that is smelted in a vacuum medium frequency furnace. It is made up of spherical or subsphaeroidal silver-gray particles with good resistance to high temperature oxidation andcorrosion resistance properties.It can be used as high temperature corrosion resistant coating and thermal barrier coating substrate.

◎ It is mainly used in atmospheric plasma spaying (APS),low pressure plasma spraying(LPPS) and High-velocity oxygen-fuel spraying (HVOF) etc.It is suitable for the surface protection of various metal materials, and widely used in component protection of aerospace, steam turbine and other industries.

◎ Particle Size: 0.011mm-0.105mm.(Providingpowder with different particle size distribution according to customer's requirement)

Grade & Chemical Composition

Grade	Chemical Composition					
	Ni	Cr	Co	Al	Y	O
ZTCM45102	Bal.	21.0~23.0	——	9.0~11.0	0.8~1.2	≤0.05
ZTCM45103	Bal.	13.0~21.0	18.0~28.0	10.0~15.0	0.1~0.8	≤0.05
ZTCM45204	——	26.0~32.0	Bal.	3.0~9.0	0.1~0.5	≤0.05
ZTCM45205	29.0~35.0	18.0~24.0	Bal.	5.0~11.0	0.1~0.8	≤0.05

Specification& Physical Properties

Spec.	Powder Size (μm)	Flow Rate (s/50g)	Apparent Density (g/cm^3)	Type of alloy powder
ZTCM45102	53~20	≤20	≥4.0	NiCrAlY
ZTCM45103	53~20	≤20	≥4.0	NiCoCrAlY
ZTCM45204	45-15	≤20	≥4.0	CoCrAlY
ZTCM45205	45-15	≤20	≥4.0	CoNiCrAlY