

INLAND ATOMIZE METAL POWDER LLP

Survey No. 230/2, Por-Manglej Road, Village - Manglej, Ta. KARJAN, Vadodara - 391243

Email: Info@Inlandatomizemetalpowder.com

Mo: +9196623 00876

IAMP NiFuse 718

Material: Nickel Base Super Alloy (UNS N07718)

Manufacturing Method: Gas Atomization

IAMP NiFuse 718 is a nickel-chromium-iron alloy powder strengthened by precipitation of γ' and γ'' phases, providing high strength, excellent fatigue resistance, and good corrosion resistance from cryogenic temperatures up to approximately 700 °C. It is widely used for high-temperature and high-stress applications.

Chemical Composition (Weight %)

Element	C	Si	Mn	P	S	Cr	Ni	Mo	Co	Nb+Ta	Ti	Al	Fe
Min						17.00	50.00	2.80		4.75	0.65	0.20	Bal.
Max	0.08	0.35	0.35	0.015	0.015	21.00	55.00	3.30	1.00	5.50	1.15	0.80	

Key Features

- High strength and fatigue resistance at elevated temperatures
- Excellent resistance to creep and stress rupture
- Good corrosion and oxidation resistance
- Stable properties over a wide temperature range
- Suitable for thick, crack-free deposits
- Can be heat treated after cladding for maximum strength
- Apparent Density: 4.0 g/cc Min

Particle Size

- Flame Spray: 45 – 106 μm / 20 – 106 μm
- HVOF: 15 – 45 μm
- PTA (Plasma Transferred Arc) / Laser Cladding: 45 – 150 μm
- Custom made particle size can be made upon request

Packaging:

Powder will be supplied by standard packing in Plastic Jar of 1Kg, 5Kg, and 25Kg or can be supplied as per customer special requirement.

Storage:

- Keep in a cool, dry environment away from humidity
- Tumble container before use to ensure powder homogeneity
- Reseal containers immediately after powder withdrawal
- If moisture pickup occurs, dry at 65–95 °C for 120 Minutes with lid loosened
- Remove Silica Gel pouch before using the powder