

Pearl[®] Micro Ni718

Powder for additive manufacturing



PEARL
Micro

CHEMICAL COMPOSITION

Elements	Fe	Al	Cr	Nb	Ni	Mo	Ti	B	Co	Cu	Mn	P	Si	C	S	O	N
Min	Rem.	0.2	17	4.75	50	2.8	0.65										
Max		0.8	21	5.5	55	3.3	1.15	0.006	0.1	0.3	0.35	0.015	0.35	0.08	0.015	0.03	0.03

STANDARDS

- European standards
 - NiCr19Fe19Nb5Mo3
 - 2.4668
- US Standards
 - UNS N07718
 - ASTM F3055

PARTICLE SIZE DISTRIBUTIONS

Laser Beam Melting (powder bed): 10-53 μm

Electron Beam Melting (powder bed): 45-106 μm

Directed energy deposition (LMD): 45-106 μm

Customized particle size distributions upon request

CHARACTERISTICS

Precipitation hardened, nickel-based superalloy powder produced by VIM Gas atomization with:

- Good resistance to high temperature oxidation
- Excellent mechanical properties up to temperatures around 700°C (1292°F)
- Generally used for parts working within the 600-700°C range (1112-1292°F)

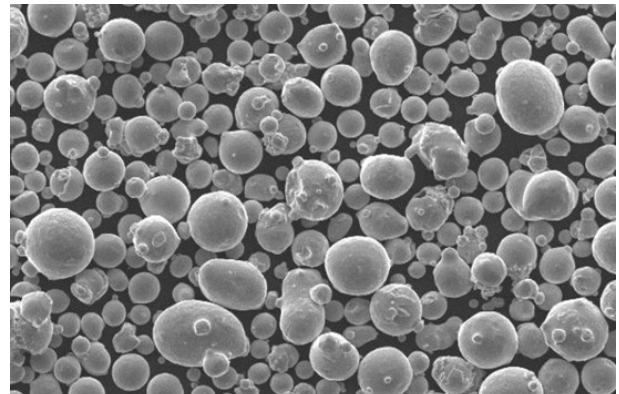
DENSITY FOR LBM

Apparent density 4.1 g/cm³ \pm 0.2

Tap density 5.0 g/cm³ \pm 0.2

Heat treatment recommended on part: AMS 5662

POWDER MORPHOLOGY



QUALITY CERTIFICATES

- EN9100 accreditation
- Certified material test report

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