

forAM® 738LC 15-45 VG

Advanced nickel superalloy for Additive Manufacturing

forAM 738LC VG is a vacuum induction melted, argon gas atomized, and spherical powder for additive manufacturing. The alloy design provides excellent high temperature creep-rupture strength and corrosion resistance up to 980 °C. The strengthening mechanism is a multiple of solid-solution strengthening of the gamma matrix, precipitation hardening by gamma-prime or gamma-double prime phases, grain boundary strengthening with carbides, boron and zirconium.

Typical applications of the forAM 738 are for engine parts of industrial gas turbines, blades, vanes and integral-wheels of gas turbines and jet engine components.

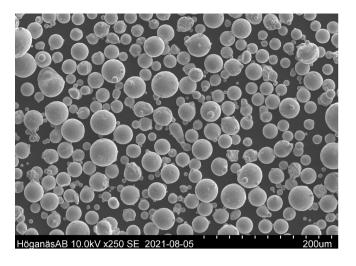
Equivalent materials:

>> Ni-SA 738LC

For more information on forAM product line and other of Höganäs products, please contact your local sales representative.

Powder properties

Chemical composition, (typical values)		
Element	Content, %	
Cr	16	
Со	8.5	
Al	3.5	
Ti	3.4	
W	2.6	
Мо	1.7	
Та	1.7	
Nb	0.9	
С	0.1	
Zr	< 0.08	
В	0.01	
Ni	Balance	



Typical powder properties		
Nominal particle range	15-45 µm (max 5% over and under size)	MPIF05, ASTM B214, ISO4497
Hall flow	16 s/50 g	MPIF03, ASTM B213, ISO4490
Apparent density	4.1 g/cm ³	MPIF04, ASTM B212, ISO3923/1

Standard packaging:

30 kg (6x5 kg, 2.5 L PE bottles packed in cardboard box) 200 kg / 500 kg Flexbag

(Other tailored particle sizes and packaging are available under conditions)