



Amperprint® 0151

Similar to Ni-SA 738LC, advanced nickel superalloy for powder bed fusion

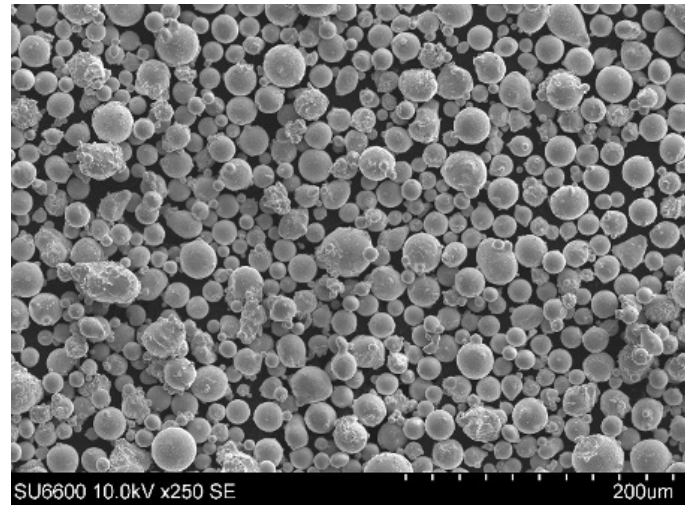
General material description

Amperprint 0151 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 **Amperprint 0151** are for engine parts of industrial gas turbines, blades, vanes and integral-wheels of gas turbines and jet engine components.

For more information on Amperprint and other Höganäs products, please contact your local sales representative.

Chemical composition, % (typical values)	
Element	Content, %
Cr	16
Co	8.5
Al	3.5
Ti	3.4
W	2.6
Mo	1.75
Ta	1.7
Nb	0.9
C	0.1
Zr	0.02
B	0.01
Ni	Balance



Typical powder properties		
Nominal particle range	15–45 µm (max 5% over- and undersize)	MPIF05, ASTM B214, ISO4497
Hall flow	18 s/50 g	MPIF03, ASTM B213, ISO4490
Apparent density	4.2 g/cc	MPIF04, ASTM B212, ISO3923/1

Standard packaging:

30 kg (6x5 kg, 2.5 L PE bottles packed in cardboard box)

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