



Amperprint® 0181

Similar to Ni-SA 718, advanced nickel superalloy for powder bed fusion

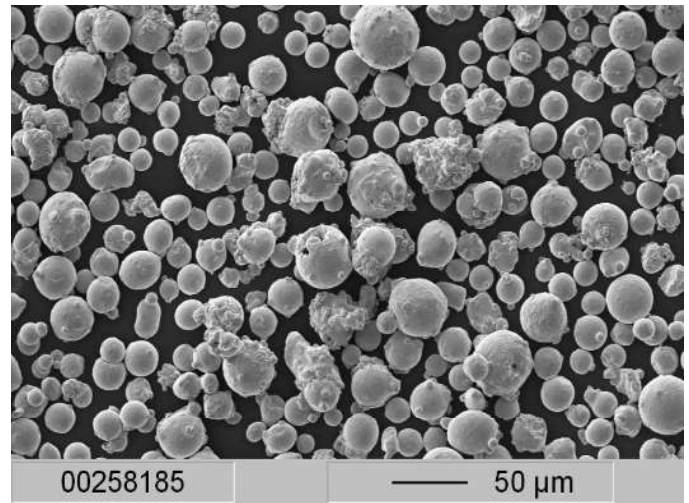
General material description

Amperprint 0181 is a vacuum induction melted, argon gas atomized, and spherical powder for additive manufacturing. The material is a gamma-prime precipitation strengthened Nickel-Chromium based super alloy. The material has exceptional mechanical properties at elevated temperature (up to 700 °C) and excellent corrosion resistance to many media. Due to its outstanding workability it is the first choice for aerospace, oil and gas industry and the chemical processing field.

Some typical applications of **Amperprint 0181** are gas turbine engines, high temperature engineering, liquid fuel and exhaust systems, oil well, petroleum, and natural gas industry, nuclear engineering, cryogenic engineering.

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

Chemical composition, % (typical values)	
Element	Content, %
Cr	19
Nb	5.2
Mo	3.1
Ti	1
Al	0.5
C	0.04
Ni	53
Fe	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	3.9 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)