



Amperprint® 1556 18Ni300

Age-hardening tool steel for laser powder bed fusion

General material description

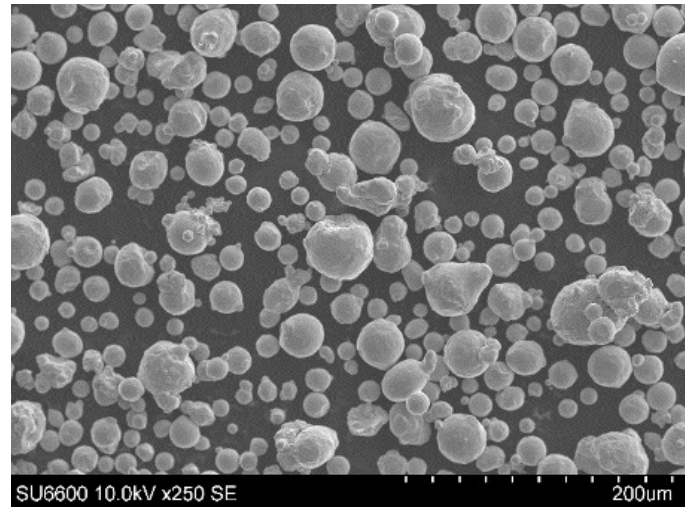
Amperprint 1556 is a vacuum induction melted, argon gas atomized, and spherical powder for additive manufacturing. After a thermal aging heat treatment of the built parts, it has high hardness >50 HRC, toughness, and strength, at high dimensional stability and low distortions. It has high machinability and retain properties at mildly elevated until ~400 °C. Typical applications are in high wear components and dies.

Equivalent materials:

- 1.2709
- X3NiCoMoTi 18-9-5
- 18Ni300

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

Chemical composition, % (typical values)	
Element	Content, %
Ni	18
Co	9
Mo	5
Ti	0.7
Al	0.1
C	0.01
Mn	0.1
Si	0.1
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	4,0 g/cc	MPIF04, ASTM B212, ISO3923/1

Heat treatment:

Precipitation hardening at 480–500 °C for 3–6 hours

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)