

ADDITIVE MANUFACTURING POWDER

L718 AMPO / NI-BASED ALLOYS

Available Product Shapes

15 - 45 µm	45 - 90 µm
------------	------------

Product Description

The BÖHLER L718 AMPO is a hardenable nickel-base super alloy. This high heat-resistant material shows good strength properties at elevated temperatures up to 750 °C, as well as excellent creep resistance up to 700 °C. In addition, it shows excellent corrosion resistance and good printability. Essentially, the same properties can be achieved with printed components made from this powder as with bar material.

Properties

Particle size distribution 15 - 45 µm:

D10[µm]	18 - 24
D50[µm]	29 - 35
D90[µm]	42 - 50
Apparent density*	≥ 3.4 g/cm ³

*Measurement of particle size distribution according to ISO 13322-2 (Dynamic image analysis methods);

Measurement of apparent density is based on ASTM B964 resp. DIN EN ISO 3923-1 and relates to our typical measured values

Achievable mechanical properties of printed part after heat treatment*:

Tensile strength (Rm)	1400 ± 50 MPa
Yield strength (RP _{0.2})	1180 ± 50 MPa
Elongation (%)	18 ± 3
Hardness	46 ± 3 HRC

*Mechanical strength according to heat treatment AMS5663 RT

Particle size distribution 45 - 90 µm:

Details on request

Applications

- > 3D Printing - direct metal deposition
- > Automotive
- > Comp. for Industrial Gas Compressors
- > Oth. Automotive components (Turbochargers, Piston Rings, Sensors, etc.)
- > Other Oil and Gas + CPI comps.
- > Unknown Components Application
- > 3D Printing - selective laser melting
- > Automotive Racing
- > CPI (inc. LNG, Urea)
- > Other Aerospace Comps.
- > Other Power Generation Components
- > Aerospace
- > Civil and mechanical engineering
- > Oil & Gas
- > Other Components
- > Powder for additive manufacturing

Material designation	
	2.4668 SEL

Chemical composition

C	Cr	Mo	Ni	Ti	Al	Nb	B	Fe
0.04	19.00	3.05	52.50	0.90	0.50	5.13	0.004	Rest

For more information see www.voestalpine.com/boehler-edelstahl

voestalpine BÖHLER Edelstahl GmbH & Co KG

Mariazeller Straße 25

8605 Kapfenberg, AT

T. +43/50304/20-0

E. info@boehler-edelstahl.at

www.voestalpine.com/boehler-edelstahl

L718AMPO EN - 09.2021

voestalpine

ONE STEP AHEAD.