

# ADDITIVE MANUFACTURING POWDER

## L625 AMPO / NI-BASED ALLOYS

### Product Description

BÖHLER L625 AMPO is a non-magnetic, corrosion and scale-resistant nickel-base alloy. High toughness and strength from the lowest temperatures up to 1000 °C. Good printability.

### Process Melting

VIGA

### 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.
- > 3D Printing - selective laser melting
- > Automotive Racing
- > CPI (incl. LNG, Urea)
- > Other Aerospace Comps.
- > Other Power Generation Components
- > Aerospace
- > Civil and mechanical engineering
- > Oil & Gas
- > Other Components
- > Powder for additive manufacturing

### Technical data

Material designation	
2.4856	SEL
Alloy 625	Market grade
N06625	UNS
NiCr22Mo9Nb	EN

### Chemical composition (wt. %)

C	Cr	Mo	Ni	Co	Ti	Al	Nb	Fe
0.05	21.5	9	≥ 58,00	≤ 1,00	0.2	0.2	3.65	≤ 5,00

## Powder Properties

### Particle Size Distribution 15-45µm

Typical Values	D10	D50	D90
[µm]	18-24	29-35	42-50

Apparent density\* | min. 3.7 g/cm<sup>3</sup>

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

## Mechanical Properties

### With according Heat Treatment

Tensile strength (Rm) (MPa   ksi)	800 to 900   117 to 131
Yield strength (Rp <sub>0.2</sub> ) (MPa   ksi)	520 to 580   76 to 85
Elongation (%)	35 to 45
Hardness (HRC)	18 to 28

Mechanical strength according to heat treatment AMS5599

For more information see <https://www.voestalpine.com/boehler-edelstahl/de/>

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