

DATA SHEET

ALLOY 625 LCF® | 625 HP® | 2.4856

Major specifications

UNS N06626 | AMS 5879 | AMS 5599

Product forms

Coils and sheets

The current Stock Range can be found on www.sd-metals.com. Further dimensions available upon request.

Key features

INCONEL Alloy 625LCF and ATI 625HP are variants of Alloy 625 with the same basic chemistry but with tighter control of the C, Si, and N content to ensure lower values, which is achieved through vacuum induction melting. When combined with careful thermal and mechanical processing, it yields a fine-grained microstructure optimized for formability and fatigue resistance. These variants offer up to 100 times the lifespan of a conventional Alloy 625.

Areas of application

Due to its longer lifespan, Alloy 625 LCF is ideally suited for use in motorsport exhaust systems as well as in bellows and expansion joints.

CHARACTERISTIC

Chemical composition limits in %	Physical constants and thermal properties	Typical mechanical properties (room temperature)
Ni min. 58,00	Density 8,44 g/cm ³	Yield strength min. 415 MPa
Cr 20,00 - 23,00	Melting point 1290 - 1350 °C	Tensile strength min. 825 MPa
Mo 8,00 - 10,00	Thermal conductivity 9,8 W/m • °C	Elongation min. 40 %
Fe max. 5,00	Coefficient of expansion at 21 - 93°C 12,8 µm/m • °C	
Nb 3,15 - 4,15		
Mn max. 0,50		
Al max. 0,40		
Ti max. 0,40		
Si max. 0,15		
C max. 0,03		
N max. 0,02		

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All information is subject to change without notice.

The properties correspond to the material in the heading. They may vary for other specifications. Please contact us for more details.