



Power generation steam turbines

Technical datasheet

Hastelloy C-22

Major specifications

ASTM B575/B574/B564/B619 AWS A5.14 UNS N06022 W. Nr. 2.4602

Available product forms

Bar/Rod: Diameter: 2mm - 600mm, Length: Normally 6m, Or Produced As Required
Sheet/Plate: Thickness: 0.3 mm- 300 mm, Width: 1000 mm- 3000 mm; Length: As required
Tube/Pipe: Outside Diameter: 4.0 - 1219mm, Thickness: 0.5- 100 mm, Length: 24000 mm
The current stock range can be found on <https://www.lorkalloy.com/>
Further dimensions available upon request.
Use our Service Centre to have the available sizes cut to your desired dimensions.

Key features

Hastelloy C-22 is a nickel-chromium-molybdenum-tungsten alloy that offers superior corrosion resistance compared to other alloys. It exhibits excellent resistance to pitting, crevice corrosion, and stress corrosion cracking, while also withstanding corrosion from wet chlorine gas, nitric acid, and mixed acids. With good thermal stability and excellent weldability, it inhibits the formation of grain-boundary precipitates in the heat-affected zone, making it suitable for use in the as-welded condition. It is widely used in chemical reactors, heat exchangers, and flue-gas desulfurization (FGD) systems.

Chemical properties

Composition - limits in %

Ni	Cr	Mo	Fe/W	Co	Fe
max.56.0	max.22.0	max.13.0	max.3.0	max.2.5	max.3.0

Physical and thermal properties

Density	8.69 g/cm ³
Melting temperature	1357-1399°C
Electrical Resistivity	1.14 µohm.m
Thermal Conductivity(50-600°C)	10.1-21.3 W/m.°C

Typical mechanical properties (room temperature-Bar)

Ultimate Tensile Strength	765 MPa
0.2% Yield Strength	359 MPa
Elongation	70

*This data comes from <https://www.lorkalloy.com/>

The data listed are typical values provided for reference only and do not constitute a guarantee.
Actual performance depends on operating conditions and should be verified by the user.