

Key Features

- Good corrosion resistance
- Good heat and oxidation resistance

Common Applications

- Automotive trim and molding
- Furnace combustion chambers
- Dishwashers
- Range hoods
- Gas burners
- Gutters
- Steam iron bases and flatware
- Interior architectural applications
- Nitric acid plant equipment

Material Description

Stainless Steel 430 is a ferritic stainless steel alloy known for its good corrosion resistance, particularly in mildly corrosive environments. It offers moderate strength and formability, making it suitable for applications such as kitchen appliances, automotive trim, and decorative panels. Stainless Steel 430 is commonly used in applications where corrosion resistance and aesthetics are important, but high mechanical properties are not required.

Chemical Composition (%)

	C	Cr	Fe	Mn	Ni	P	Si	S			
Min.		16	79.31								
Max.	0.12	18		1.0	0.50	0.040	1.0	0.030			

Mechanical Properties

Ultimate Tensile Strength	70,100 PSI
Tensile Yield Strength	45,000 PSI
Hardness	Rockwell B89
Elongation at Break	25%

Physical Properties

Density	0.280 lb/in ³ (7.74 g/cm ³)
Thermal Conductivity	26.1W/m.K
Modulus of elasticity	29,000 KSI (200 GPa)
Melting Point	2,696–2,786°F (1,480–1,530 °C)

Technical Assistance

Our knowledgeable staff, supported by our in-house team of expert metallurgists and engineers, is ready to assist you with any technical inquiries.

InstaVoxel™ – On-Demand Manufacturing Expert

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InstaVoxel's quality control system is ISO-9001 certified, and all our partners hold relevant certifications.



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