

Key Features

- Good machinability
- Good workability and weldability
- LOW electrical conductivity
- LOW tensile strength

Common Applications

- Valve
- Pump
- General Engineering
- Automotive Industry

Material Description

Steel 1015 is a low-carbon steel known for its good formability and weldability. With its relatively low carbon content, it is easier to shape and machine compared to higher carbon steels, making it suitable for applications where these properties are critical. Steel 1015 is commonly used in automotive components, light machinery, and general structural applications. While it provides adequate strength for many uses, its lower carbon content means it offers lower hardness and strength compared to medium or high-carbon steels.

Chemical Composition (%)

	C	Fe	Mn	P	S						I
Min.	0.13	99.13	0.30								
Max.	0.18	99.57	0.60	0.040	0.050						

Mechanical Properties

Ultimate Tensile Strength	55,800 PSI
Tensile Yield Strength	47,100 PSI
Hardness	Rockwell B64
Elongation at Break	18%

Physical Properties

Density	0.284 lb/in ³ (7.87 g/cm ³)
Thermal Conductivity	51.9W/m.K
Modulus of Elasticity	29,700 KSI (205 GPa)
Melting Point	2,670°F (1,470 °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

859 Willard Street Suite 400, Quincy MA 02169 USA
+1 (617) 302-1629 | info@instavoxel.com
www.instavoxel.com



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



All information in our data sheet is based on approximate testing and provided to the best of our knowledge and belief. It is presented without any contractual obligations and does not constitute a guarantee of properties, processing, or application possibilities in specific cases. Our warranties and liabilities are defined solely by our terms of trade.