

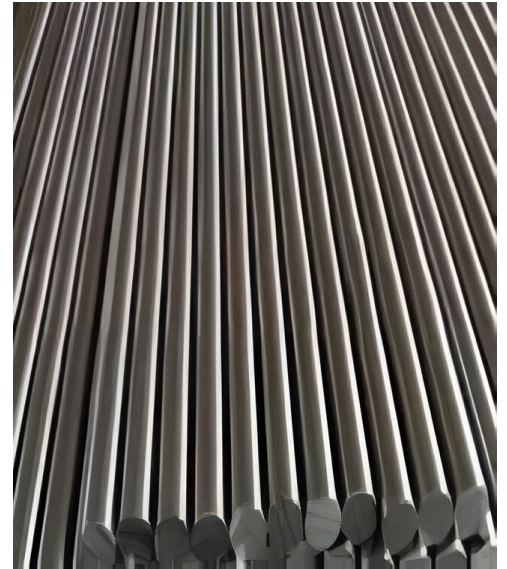
# AISI 4330V Alloy Steel

## AISI 4330V ALLOY STEEL DATASHEET

AISI 4330V Alloy Steel is a nickel-chromium-molybdenum-vanadium alloy steel that belongs to low-alloy high-strength structural steel. As an improved version of 4330 alloy steel grade, 4330V improves hardenability by adding vanadium, and can obtain higher strength and low temperature impact resistance after quenching and tempering heat treatment. 4340V steel is suitable for parts subject to impact load or stress concentration.

It is widely used in the oil and gas industry for applications such as oil tools, drill bits, jars, tool holders and reamers, as well as bolted joints and air frames in the aerospace industry.

Product forms include bar, seamless tubing, and plate.



### Standards

- UNS K23080
- AMS 6411
- AMS 6427

### Physical Properties

- Density: 0.283 LB/in<sup>3</sup> (7.84 g/cm<sup>3</sup>)

### Characteristics

- Good for applications involving shock loading or stress
- High strength and resistance to crack propagation

### Chemical Composition

	C	Mn	S	Si	P	Cr	Mo	Ni	V
MIN	0.28	0.65	-	0.15	-	0.75	0.35	1.65	0.05
MAX	0.33	1.00	0.15	0.35	0.015	1.00	0.50	2.00	0.10

### Mechanical Properties

Tensile (min) KSI (Mpa)	Yield (min) KSI (Mpa)	Elongation (min) %	Reduction of Area (min) %	Hardness (max) HRC
160/175 (1103/1207)	150/165 (1034/1138)	13	35	47