



440C is a hardenable chromium steel. After heat treatment, it is capable of attaining the highest strength, hardness and wear resistance of all stainless alloys.

## Specifications

ASTM: A480  
ASTM: A276  
UNS: S44004

## Chemical Composition, %

Element	Maximum Unless Range is Specified
Carbon	1.20
Chromium	18
Manganese	1
Molybdenum	0.75
Phosphorus	0.040
Silicon	1
Sulphur	0.30

## Features

- Hardenable chromium steel
- High strength
- High wear resistance

## Applications

- Cutting Instruments
- Knife Blades
- Surgical Instruments
- Chisels
- Ball Bearings and Valves

## Physical Properties

Properties	
Density kg/m <sup>3</sup>	7650
Thermal Conductivity 212°F, 100°C	24.2
Thermal Conductivity at 932°F, 500°C	-
Electrical Resistivity	600
Elastic modulus (Gpa)	200

## Mechanical Properties

Property	
Annealed	Type 440C
Yield Strength, 0.2% Proof (MPa)	448
Tensile Strength (Mpa)	75
Elongation (% in 50mm)	14
Hardness (HB)	269 max