

Products & Sizes

Bar

0.125" - 1.250"

Custom 465® Chemical Composition

	Element	Min	Max
Mn	Manganese	-	0.50
S	Sulfur	-	0.030
Cr	Chromium	11.00	12.50
Mo	Molybdenum	-	0.50
Ti	Titanium	0.80	1.40
Fe	Iron	-	Balance
C	Carbon	-	0.05
P	Phosphorous	-	0.040
Si	Silicon	-	0.50
Ni	Nickel	7.50	9.50
Cu	Copper	1.50	2.50
Nb/ Ta	Columbium & Tantalum	0.10	0.50

Industry Standards

Industry Applications

- Surgical instruments for orthopedic, spinal, & dental markets
- Drill bits
- Drivers
- Distractors
- Shafts
- Aerospace
- Oil and gas
- Sports equipment

Related Industries

Defense

Medical

Oil & Gas

Space

Physical Properties

Density Condition	g/cm ³
Annealed/CT	7.81
H900	7.82
H950	7.83
H1000	7.84
H1050	7.86
H1100	7.86

Mechanical Properties

Property	Value
Condition	H950
Yield Strength, MPa (ksi)	1648 (239)
Ultimate Tensile Strength, MPa (ksi)	1751 (254)
Elongation	14%
Reduction in Area	63%
Fracture Toughness	98 (89)
Charpy V-Notch Energy, J (ft-lb)	27 (20)