

Custom 465® is a premium melted, martensitic, age-hardenable stainless steel alloy. This material was designed with improved tensile strength, fracture toughness and improved fabricability and excellent resistance to stress corrosion cracking. It has been used in the medical industry, oil and gas drilling, aerospace components, marine equipment, firearms and hand tools.

Specifications AMS: 5936
 UNS: S46500
 ASTM: F-899

Chemical Composition, %

	C	P	Si	Ni	Ti
MIN	—	—	—	10.75	1.50
MAX	0.02	0.015	0.25	11.25	2.50

	Mn	S	Cr	Mo	Fe
MIN	—	—	11.00	0.75	
MAX	0.25	0.010	12.50	1.25	Bal.

Features

- High strength and toughness
- Easy to fabricate
- Reliable, long-term service in corrosive environments

Applications

- Drivers
 - Drill Bits
 - Distractors
 - Shafts
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Mechanical Properties

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)

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