

Stainless Steel

1.4005 (416) Bar

Datasheet Updated
05 August 2021

RANGE

Product Form	Condition	Imperial Sizes	Metric Sizes
Round Bar	QT650	1/8" - 6"	4mm - 30mm
Round Bar	Condition P	1/8" - 6"	4mm - 30mm

SPECIFICATIONS

Commercial	416
EN	1.4005

Martensitic stainless steel machining bar.

CHEMICAL COMPOSITION

EN 10088-3
1.4005 Steel

Element	% Present
Carbon (C)	0.06 - 0.15
Chromium (Cr)	12.00 - 14.00
Manganese (Mn)	0.00 - 1.50
Silicon (Si)	0.00 - 1.00
Phosphorous (P)	0.00 - 0.04
Sulphur (S)	0.15 - 0.35
Molybdenum (Mo)	0.00 - 0.60
Iron (Fe)	Balance

ALLOY DESIGNATIONS

SUPPLIED FORMS

- Bar

APPLICATIONS

- Valve parts
- Pump shafts
- Automatic screw machine parts
- Motor shafts
- Washing machine components
- Bolts and nuts
- Studs
- Gears

CHARACTERISTICS

- Excellent machinability
- Low cost
- Improved non-galling characteristics
- Poor weldability
- Poor formability
- Limited corrosion resistance

MECHANICAL PROPERTIES

EN 10088-3
Bar Up to 160mm Dia or Thickness

Property	Value
Proof Stress	450 Min MPa
Tensile Strength	650 - 850 MPa

DISCLAIMER

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