

Stainless Steel

1.4021 (420) Bar

Datasheet Updated
05 August 2021

SPECIFICATIONS

Commercial	420
EN	1.4021

A martensitic machining bar with machinability enhanced through the addition of sulphur.

CHEMICAL COMPOSITION

EN 10088-3
1.4021 Steel

Element	% Present
Carbon (C)	0.16 - 0.25
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)	0.00 - 0.03
Iron (Fe)	Balance

ALLOY DESIGNATIONS

1.4021 is similar, **but may not be a direct equivalent to:**

- 420
- UNS42000
- 1.4021, 1.4024, 1.4028, 1.4029, 1.4030, 1.4034

SUPPLIED FORMS

- Bar

APPLICATIONS

- Valve parts
- Pump shafts
- Automatic screw machined parts
- Motor shafts
- Washing machine components
- Bolts and nuts
- Studs
- Gears
- Shear blades
- Cutlery (blades)
- Surgical instruments

CHARACTERISTICS

- Good corrosion resistance similar to 410 plus increased strength and hardness
- It is magnetic in both the annealed and hardened conditions
- Maximum corrosion resistance is attained only in the fully hardened condition
- It is never used in the annealed condition

MECHANICAL PROPERTIES

EN 10088-3

Bar Up to 160mm Dia / Thickness

Property	Value
Proof Stress	500 - 600 MPa
Tensile Strength	700 - 950 MPa
Elongation A	12 - 13 %

DISCLAIMER

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