

1.4028 420B

| X30Cr13 | %C | %Si | %Mn | %P | %S | %Cr | %Cu | %Mo | %Nb | %Ni |
|---------|------|------|------|-------|-------|-------|-----|-----|-----|-----|
| | 0.26 | - | - | - | - | 12.00 | - | - | - | - |
| | 0.35 | 1.00 | 1.50 | 0.040 | 0.030 | 14.00 | - | - | - | - |

STEEL PROPERTIES

1.4028 420B is a martensitic stainless steel, also known as AISI 420B or X30Cr13. It is commonly used in applications that require moderate corrosion resistance and good mechanical properties.

EQUIVALENT GRADES

| | | |
|------------|----------|---------|
| EN 10088-3 | 1.4028 | X30Cr13 |
| AFNOR | Z30C13 | |
| JIS | SUS420J2 | |
| AISI | 420B | |
| BS | 420S45 | |

APPLICATIONS

1.4028 420B is typically used in the Cutlery & Kitchen Tools, Surgical Instruments, Shafts & Valve Parts, Pump & Impeller Components, Fasteners & Bolts.

HEAT TREATMENT

1.4028 420B is supplied in annealed +A and +QT conditions.

Mechanical Values for 1.4028 420B at room temperature in EN 10088-3: 2014 inconditions 1C, 1E, 1D, 1X, 1G, 2D

| Diameter (mm) | Heat Treatment Condition | Hardness HB max. | 0.2% Proof strength min. | Tensile Strength R _m Mpa | Elongation after fracture A % Min. | | Impact Energy (ISO-V) KV J Min. | |
|---------------|--------------------------|------------------|--------------------------|-------------------------------------|------------------------------------|-------|---------------------------------|-------|
| | | | | | (long) | (tr.) | (long) | (tr.) |
| - | +A | 245 | - | Max 800 | - | - | - | - |
| ≤160 | +QT 850 | - | 650 | 850 to 1000 | 10 | - | 15 | - |

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Mechanical Values for 1.4028 420B Bright Bars at room temperature in EN 10088-3:2014 in conditions 2H, 2B, 2G, 2P

| Diameter (mm) | Annealed | | Heat Treatment Condition | 0.2% Proof strength min. | Tensile Strength R _m Mpa | A5 % Min Elongation | | Impact Energy (ISO-V) KV J Min. | |
|------------------|---------------------------|-----------|--------------------------------|-----------------------------------|---|------------------------|-------|--|-------|
| | R _m Mpa Max | HB Max | | | | (long) | (tr.) | (long) | (tr.) |
| ≤10 | 950 | 305 | +QT 850 | 700 | 900 to 1050 | 7 | - | - | - |
| 10 <t ≤ 16 | 950 | 305 | +QT 850 | 650 | 900 to 1050 | 7 | - | - | - |
| 16 <t ≤ 40 | 900 | 280 | +QT 850 | 650 | 850 to 1100 | 9 | - | 15 | - |
| 40 <t ≤ 63 | 840 | 260 | +QT 850 | 650 | 850 to 1050 | 9 | - | 15 | - |
| 63 <t ≤ 160 | 800 | 245 | +QT 850 | 650 | 850 to 1000 | 10 | - | 15 | - |

PRODUCTS OFFERED

- PEELED BARS
- BRIGHT BARS
- HEXAGONS
- SQUARES
- FLAT BARS
- WIRES