



WINTRADE S.r.l.
CHROME PLATED BARS • STEEL TUBES • SPECIAL STEELS

42CrMo4 +QT

Induction hardened
chromed bar

According to EN 10083-3:2006

Corrosion Resistance

ISO 9227 NSS Rating 9 ≥ 120 h

Chemical analysis

| C | Mn | Si | P | S | Cr | Mo | Ni |
|-----------|-----------|-------|--------|--------|-----------|-----------|----|
| 0,38±0,45 | 0,60±0,90 | ≤0,40 | ≤0,025 | ≤0,035 | 0,90±1,20 | 0,15±0,30 | - |

Mechanical properties at room temperature

| Base material | Diameter Ø mm. | Rp0,2 min. N/mm ² | Rm N/mm ² | A min. % | KV min. (J) | C min. (%) | HB max |
|---------------|----------------|---------------------------------|-------------------------|-------------|----------------|---------------|---------|
| Hot rolled | 16÷40 | 750 | 1000÷1200 | 11 | 35 | 45 | 298÷359 |
| Hot rolled | 40÷100 | 650 | 900÷1100 | 12 | 35 | 50 | 271÷331 |
| Hot rolled | 100÷160 | 550 | 800÷950 | 13 | 35 | 50 | 240÷286 |
| Hot rolled | 160÷250 | 500 | 750÷900 | 14 | 35 | 55 | 225÷271 |

Tolerance: ISO f7

Diameter range: diam. 16 - 1000 mm

Surface roughness: Ra - max. 0,20 µm (statistical average 0,05 – 0,15 µm)

Chromium thickness: Ø < 20 mm = min. 15 µm Ø ≥ 20 mm = min. 20 µm

Chromium hardness: min. 900 HV

Induction Hardness: 59±3 HRC

Hardening Depth: 0,5 - 4 mm according diameter

General properties and applications

42CrMo4 induction and hardened chromed bar is used by hydraulic industries extensively, especially when they need hard mechanical properties or anywhere they need more corrosion resistance. It's employed by other industrial sectors for a wide range of exploitations.

Typical applications are: agricultural equipment, compressors, car jacks and other transport lifting equipment, processing equipment, hoists, mining and other earth moving equipment, machine tools, mechanical tools and equipment, rods and shafts (various), waste disposal transport and equipment etc.