

Variants:

FDMAW: Consumable electrode remelted steel

SPECIFICATIONS

AIR : 30 NCD 16

TYPICAL MECHANICAL PROPERTIES

- Annealed condition: heat to 675°C followed by slow cooling.
 - Brinell Hardness: 235

HEAT TREATMENT REFERENCE

- Oil quench from 825/850°C. Temper at 200°C
 - UTS: 1750 N/mm²
 - 0.2 % Yield strength: 1250 N/mm²
 - Elongation (5d): 12 %
 - Impact strength KCU: 70 J/cm²
- Oil quench from 825/850°C. Temper at 625°C
 - UTS: 1000 N/mm²
 - 0.2 % Yield strength: 900 N/mm²
 - Elongation (5d): 19 %
 - Impact strength KCU: 140 J/cm²

COMPOSITION

Carbon.....	0.30
Nickel	3.50
Chromium.....	1.20
Molybdenum.....	0.45

APPLICATIONS

- Aerospace or general mechanical parts
- Tools

CHARACTERISTICS

- Excellent hardenability
- Good resistance to fatigue and repeated impact

HEAT TREATMENT

- Harden:
 - Heat to 825/850°C
 - Oil quench
- Temper:
 - Depending on properties required

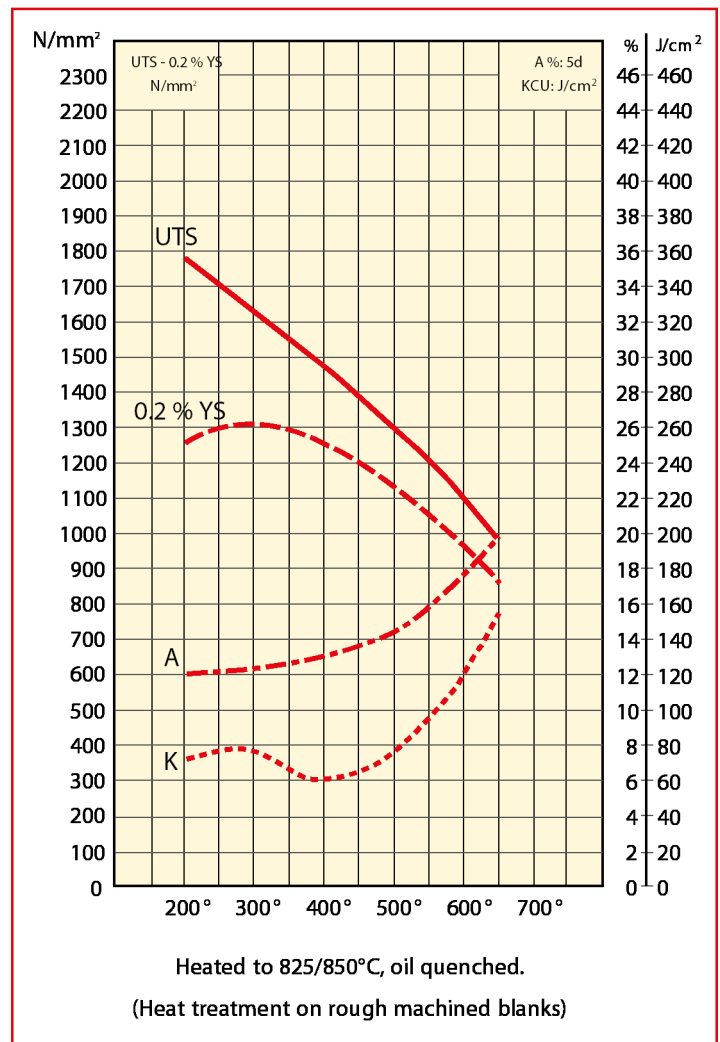
PHYSICAL PROPERTIES

- Density: 7.8
- Mean coefficient of expansion in m/m.°C:
 - between 20°C and 100°C: 11.2×10^{-6}
 - between 20°C and 700°C: 13.7×10^{-6}
- Critical points:
 - Ac 1: 650°C
 - Ac 3: 765°C

FORGING

- 1100/900°C

TEMPERING CURVE



Contact :

www.aubertduval.com

The data provided in this document represent typical or average values rather than maximum or minimum guaranteed values. The applications indicated for the grades described are given as guidance only in order to help the reader in his personal assessment. Please note that these do not constitute a guarantee whether implicit or explicit as to whether the grade selected is suited to specific requirements. Aubert & Duval's liability shall not under any circumstances extend to product selection or to the consequences of that selection.