

SPECIFICATIONS

43CrMo4

TYPICAL MECHANICAL PROPERTIES

- Annealed condition: heat to 825°C followed by slow cooling.
 - Brinell Hardness: 217

HEAT TREATMENT REFERENCE

- Oil quench from 850°C. Temper at 675°C.
 - UTS: 1000 N/mm²
 - 0.2 % Yield strength: 800 N/mm²
 - Elongation (5d): 19 %
 - Impact strength KCU: 95 J/cm²

COMPOSITION

| | |
|-----------------|------|
| Carbon | 0.43 |
| Chromium..... | 1.00 |
| Molybdenum..... | 0.20 |

APPLICATIONS

- Various wear resistant mechanical parts.
- Ball screws.
- Flattening rolls.

CHARACTERISTICS

- After heat treatment to UTS 880/1050 N/mm², this steel can be surface hardened by induction treatment.
- After hardening, surface hardness is approximately 700 Vickers.

HEAT TREATMENT

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

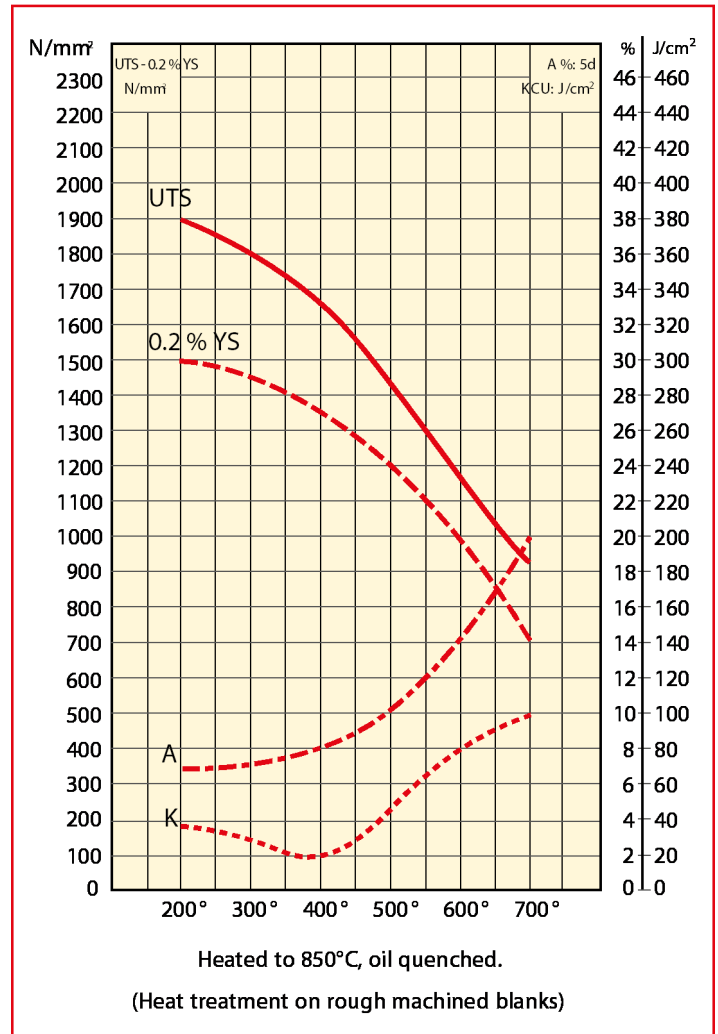
PHYSICAL PROPERTIES

- Density: 7.8
- Mean coefficient of expansion in m/m.°C:
 - between 20°C and 100°C: 11.6×10^{-6}
 - between 20°C and 700°C: 14.6×10^{-6}
- Critical points:
 - Ac 1: 740°C
 - Ac 3: 800°C

FORGING

- 1100/900°C

TEMPERING CURVE



Contact:

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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.