

Consumable electrode remelted steel

SPECIFICATIONS

European standard:

EN : X40CrMoV5-1

AFNOR: X40CrMoV5-1

W.Nr : 1.2344

DIN : X40CrMoV5-1

AISI : H13

JIS : SKD61

TYPICAL MECHANICAL PROPERTIES

- Softened condition,
Hardness approximately 240 HB

COMPOSITION

Carbon.....	0.40
Chromium.....	5.10
Moybdenum	1.35
Vanadium.....	1.10

APPLICATIONS

- Die blocks and inserts for drop-stamping
- Dies for light alloy die casting
- Parts and molds for manufacturing plastic materials
- Extrusion dies

CHARACTERISTICS

- Excellent resistance to wear
- Suitable for high level of polishing
- Suitable for chemical graining
- Good thermal conductivity
- Suitable for surface coatings

HEAT TREATMENT

- Harden:
 - Preheat to 750°C.
 - Raise to 1030°C
 - Air cool or gas pressure quench

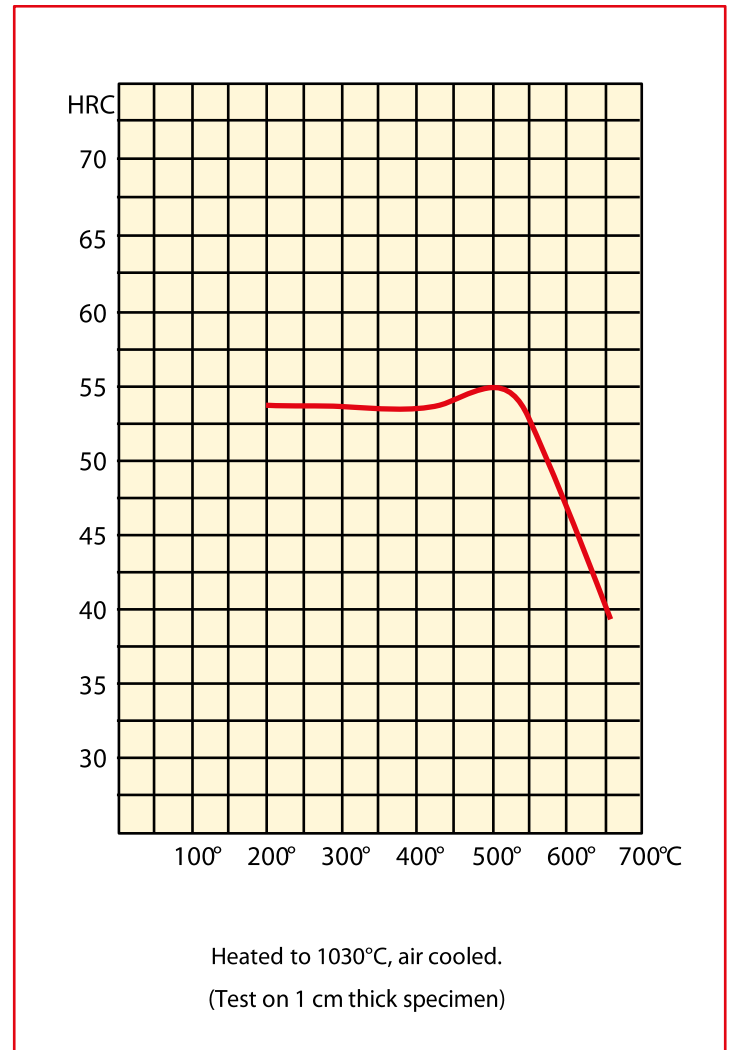
It is recommended that heating should take place in a neutral atmosphere.

- Temper:
 - 1st temper at 550°C
 - 2nd temper between 550°C and 650°C according to hardness required

PHYSICAL PROPERTIES

- Density: 7.8
- Mean coefficient of expansion in m/m.°C:
 - between 20°C and 100°C: 10.9×10^{-6}
 - between 20°C and 300°C: 11.6×10^{-6}
 - between 20°C and 500°C: 12.9×10^{-6}
- Critical points:
 - Ac 1: 840°C
 - Ac 3: 910°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.