

# CMR/1.2316

## CHEMICAL PROPERTIES:

Brand	Mat.-No.	Short name	Reference analysis %					
			C	Si	Mn	Cr	Mo	Ni
CMR	1.2316	X38CrMo16	0.40	≤1.00	≤1.00	16.00	1.20	(≤1.00)

## TYPE OF STEEL AND CHARACTERISTICS:

**Hardenable steels, resistant to oxidation and corrosion.** The high chromium content provides a good resistance in corrosion, subject to surface being polished after heat treatment.

## APPLICATIONS:

Moulds for corrosive thermoplastic material. Chromizing is not necessary. This grade allows two grades allow very high polish. It is generally supplied prehardened to 800-1100 MPa according to request

## HEAT TREATMENT :

**Annealing:** Temperature 780-800°C

**Holding Time:** 4-6h; Slow furnace cooling

**Hardness after annealing:** 250 HB

**Stress relieving:** Temperature appr. 650°C

**Holding Time:** 1-2h; Slow cooling

**Hardening:**

Temperature : 1020-1050°C (CMR)

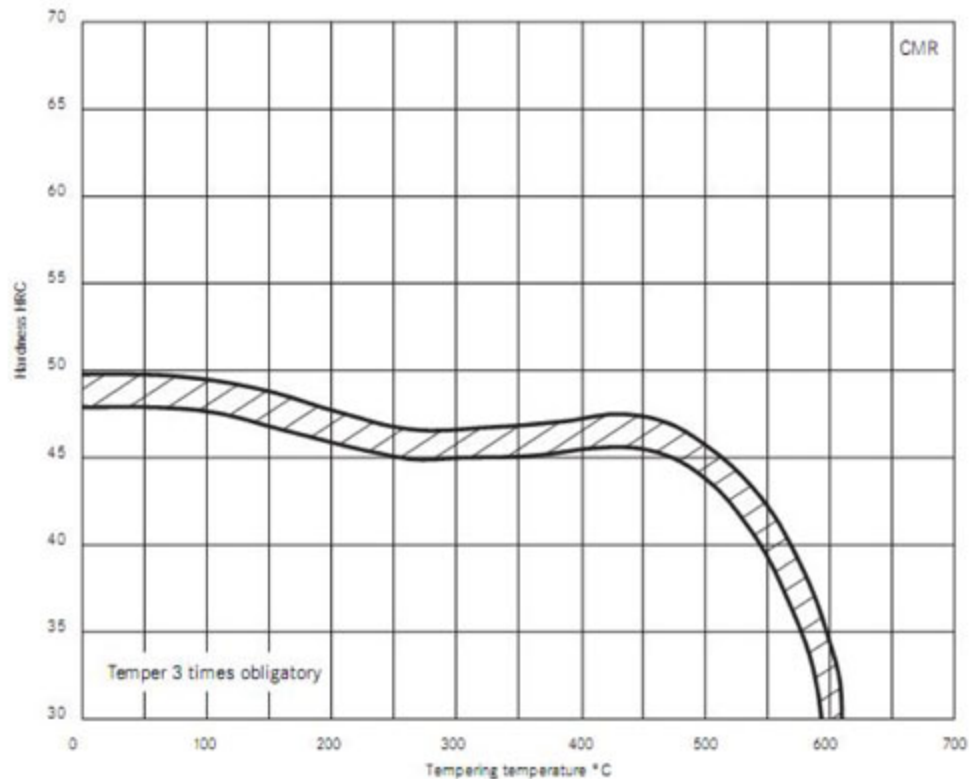
Quenching: oil or polymer (interrupt at appr 120-150°C)

**Hardness obtainable:** appr 52 HRC

**Tempering:** according to diagram, to values between 32-48 HRC

**Nitriding :** possible with appropriate tempering; however, this treatment reduces resistance to corrosion

## Tempering diagram



## TTT-Diagram

