

# Formadur 2190 Superclean

(X37Cr13)

C 0.37 Si 0.90 Mn 0.50 Cr 13.6 V 0.30

## Steel properties

Corrosion-resistant, very good polishability.

## Physical properties

### Coefficient of thermal expansion

at °C	20 – 100	20 – 150	20 – 200	20 – 250	20 – 300	20 – 350	20 – 400	20 – 450	20 – 500
$10^{-6} \text{ m}/(\text{m} \cdot \text{K})$	10.7	11.0	11.2	11.5	11.7	11.9	12.1	12.3	12.4

Quenched and tempered

### Thermal conductivity

at °C	23	150	300	350	400	500
$\text{W}/(\text{m} \cdot \text{K})$	21.5	23.2	23.9	24.3	24.2	24.0

Quenched and tempered

## Applications

Moulds for processing of corrosive plastics.

## Heat treatment

### Soft annealing °C

760 – 800

### Cooling

Furnace

### Hardness HB

max. 230

### Hardening °C

1000 – 1050

### Quenching

Oil or  
saltbath, 500 – 550 °C

### Hardness after quenching HRC

56

### Tempering °C

HRC

100

56

200

55

300

52

400

51

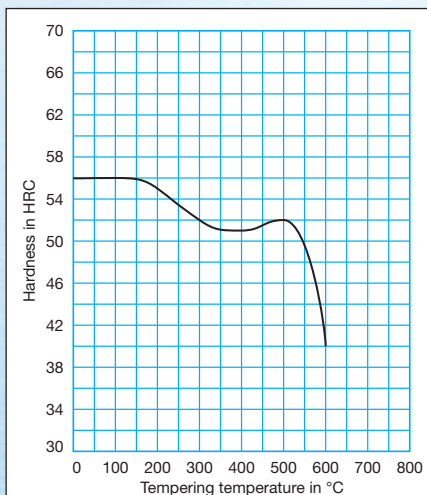
500

52

600

40

## Tempering diagram



Reference numbers in brackets are not standardized in EN ISO4957.