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# Formadur PH X Superclean

(X5CrNiCuNb15-5)

C 0.05 Cr 15.00 Ni 4.50 Cu 3.50 Nb +

## Steel properties

Formadur PH X Superclean is a corrosion-resistant, precipitation hardened steel with high strength. It shows excellent polishability due to the applied remelting process. Compared to Formadur 2316, hardness in as-delivered condition and corrosion resistance are improved.

## 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
$10^{-6} \text{ m}/(\text{m} \cdot \text{K})$	10.4	10.6	10.9	11.1	11.4	11.5	11.7	11.9	12.0

Precipitation hardened

### Thermal conductivity

at °C	23	150	300	350	400	500
$\text{W}/(\text{m} \cdot \text{K})$	16.8	20.1	22.1	22.8	23.3	24.1

Precipitation hardened

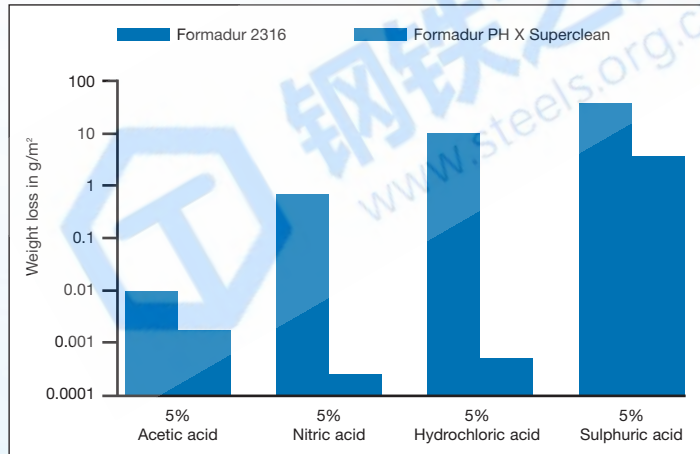
## Applications

Formadur PH X Superclean is recommended for tools used in the processing of corrosive plastics. Further applications for components in aircraft and chemical industries.

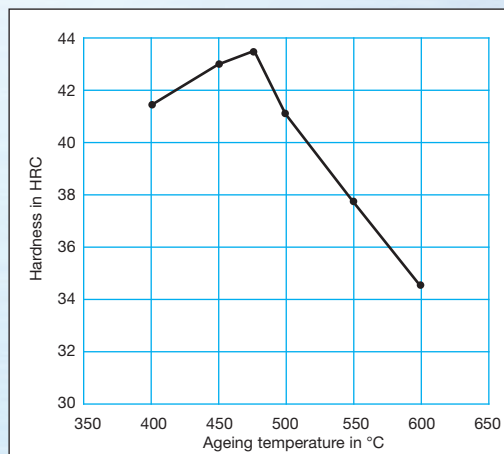
## Heat treatment

Formadur PH X Superclean usually is supplied in precipitation-hardened condition with a hardness of 40 HRC.

## Weight loss diagram



## Ageing diagram



Reference numbers in brackets are not standardized in EN ISO4957.