

## Thermodur 2782 Superclean

X16CrNiSi25-20

C 0.15 Si 2.00 Mn 0.80 Cr 25.00 Ni 20.00

### Steel properties

Non-scaling, austenitic hot-work tool steel, which is resistant to oxidizing environments and displays good cold workability. Resistant to scaling in air up to approx. 1150 °C. Delivered in precipitation hardened condition 650 – 800 MPa.

### Physical properties

#### Coefficient of thermal expansion

at °C	20 – 200	20 – 400	20 – 600
$10^{-6} \text{ m}/(\text{m} \cdot \text{K})$	16.5	17.0	17.5

#### Thermal conductivity

at °C	20	700
$\text{W}/(\text{m} \cdot \text{K})$	13.0	19.0

### Applications

Tools for glass product manufacturing, such as punches, couplers, blowing iron heads and mandrels, orifices, blowpipes, and gathering irons.

### Heat treatment

**Soft annealing °C**  
1000 – 1100

**Quenching**  
Air or water

**Hardness after quenching MPa**  
495 – 705