

Chemical composition in %

| C | Si | Mn | Cr | Mo | V |
|------|------|------|------|------|------|
| 1.00 | 0.30 | 0.50 | 5.00 | 0.95 | 0.20 |

Material Properties

- High dimensional stability during heat treatment
- High wear resistance and toughness

Typical Applications

- Cutting tools
- Rolls
- Shear blades
- Cold pilger mandrels
- Cold stamping tools
- Moulds for plastics processing

Physical properties

Coefficient of thermal expansion in 10⁻⁶ m/(m.K)

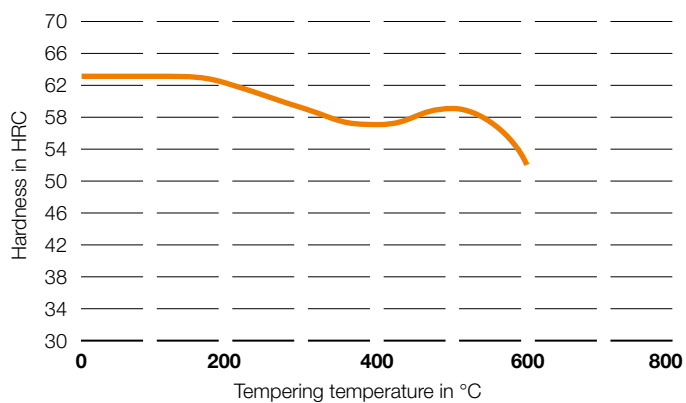
| | |
|--------|------|
| 20 °C | 15.8 |
| 350 °C | 26.7 |
| 700 °C | 29.1 |

Heat treatment

| | | | |
|--------------------------------|----------------|--------------------------------|------------------------|
| Soft annealing | 800–840 °C | Furnace | ≤ 241 HB |
| Stress-relief annealing | approx. 650 °C | Furnace | |
| Hardening | 930–970 °C | Air, oil, saltbath, 500–550 °C | 63 HRC after quenching |
| Tempering | 100 °C | | 63 |
| | 200 °C | | 62 |
| | 300 °C | | 59 |
| | 400 °C | | 57 |
| | 500 °C | | 59 |
| | 600 °C | | 52 |

Cryodur® 2363

Tempering



Time-temperature-transformation

