

Chemical composition in %

C	Si	Mn	Cr	Mo	Ni
0.45	0.25	0.35	1.40	0.20	4.00

Material Properties

- High hardenability and toughness
- Highly suitable for polishing, texturing and EDM machining

We recommend the use of Cryodur® 2767 (ESR) for extreme demands.

Typical Applications

- Cutlery dies
- Cutting tools for thick material
- Billet-shear blades
- Drawing jaws
- Massive embossing and bending tools
- Plastic moulds
- Reinforcements

Physical properties

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

	annealed	Quenched and tempered
20–100 °C	11.7	12.0
20–200 °C	12.6	12.5
20–300 °C	13.0	13.0

Thermal conductivity in W/(m.K)

	annealed	Quenched and tempered
100 °C	38.2	27.7
150 °C	38.6	28.9
200 °C	38.9	29.7
250 °C	39.1	30.5
300 °C	39.6	31.0

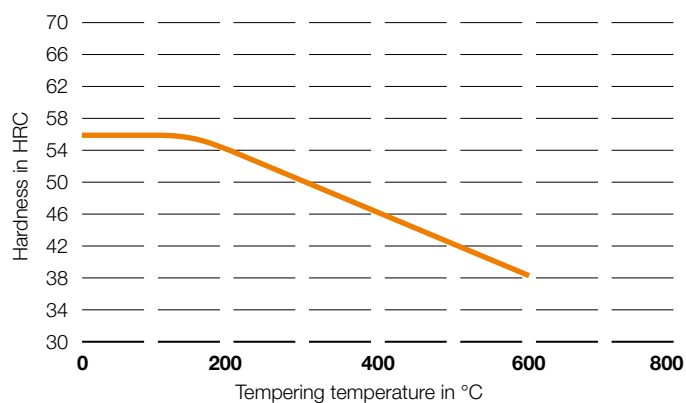
Heat treatment

Soft annealing	610–650 °C	Furnace	≤ 260 HB
Stress-relief annealing	approx. 600–650 °C	Furnace	
Hardening	840–870 °C	Air, oil, saltbath, 180–220 °C	56 HRC after quenching
Tempering	100 °C		56
	200 °C		54
	300 °C		50
	400 °C		46
	500 °C		42
	600 °C		38

Cryodur® 2767



Tempering



Time-temperature-transformation

