

Material: 1.2379



Material No.: 1.2379
Abbreviated DIN Name: X155 CrVMo 12-1

Chemical Analysis (%):	C	Cr	Mo	V
	1,53	12,0	0,7	1,0

Hardness: soft-annealed to max. 225 HB
(~860 N/mm²)

Characteristics

Material Properties:

Versatile cold working steel, high chrome alloyed steel, good dimensional stability and toughness combined with high compressive strength. For good eroding properties, secondary hardening is recommended.

Uses:

Compression moulding and injection moulding tools for reinforced plastics. Cutting, punching and thermoforming tools and other applications where a high level of toughness is required.

Remarks

- Polishing:** Possible in the hardened state.
- Graining:** Not usual.
- Nitriding:** Only recommended after secondary hardening.
- Hardening:** At 1000°C - 1050°C
The most suitable heat treatment for the relevant workpiece should be suggested by the heat treatment company.
- Soft annealing:** 820°C - 850°C, ca. 4 Std.
- Stress-relief annealing:** To eliminate residual stress after coarse machining at approx. 600°C - 650°C, approx. 4 h with slow heating and furnace cooling.
- Normal Working Hardness:** 58 - 62 HRC
- Dimensions Available:** W x L : on request
H - : on request

Physical Properties

Thermal expansion coefficient (10⁻⁶·m) / (m·K)

100	200	300	400	500	600	700	°C
10,5	11,0	11,0	12,0				

Thermal conductivity
W / (m·K)

20	350	700	°C
17,2	21,0	24,7	