



# TC-379

**Material no. 1.2379 DIN X153CrMoV12 AISI D2**

Chemical composition	C	Cr	Mo	V
Approximate values in %	1,55	11,50	0,70	1,00

## Description and applications:

TC-379 is a steel with a special combination of toughness and wear resistance.

Applications: high-performance cutting tools, circular or flat thread rolling dies, shear blades, broaches, woodworking tools, drawing, deep drawing and extrusion tools, cold rolls, ...

Bath nitriding is possible (Tenifer treatment)

## Heat treatment:

Hot forming:	1050 – 850°C
Soft annealing:	830 – 850°C / 4 – 6 h
Brinell-hardness after annealing:	max. 255 HB
Stress relieving:	650°C
Preheating to hardening:	850°C
Hardening temperature:	1020 – 1050°C <sup>1)</sup> 1050 – 1070°C <sup>2)</sup>
Quenching:	oil, dry air blast, warm bath (500 – 550°C)
Tempering:	180 – 250°C <sup>1)</sup> 550 – 570°C <sup>2)</sup> / 2x – 1 h / 25 mm
	<sup>1)</sup> Standard <sup>2)</sup> Tenifer-treatment

## Tempering chart:

Hardening: 1020°C in oil (1070°C in oil)  
Tempering: 1h, air cooling  
Specimen size: ø 25x50 mm

