

TH-343

Material no. 1.2343
DIN X37CrMoV5-1

Hot wear resistance



Heat toughness



Chemical composition

(Approximate values in %:)

C	Si	Cr	Mo	V
0,37	1,00	5,15	1,30	0,40

Description and applications:

Air-hardening steel with high-temperature strength and toughness. General purpose steel.

Applications: especially tools for processing light-metal alloys by extrusion, like liners, dies and punches, mandrels, pressure pads, upsetting and shearing dies, centring and shearing drifts.

Further applications: die casting pattern, center and ejector of the light-metal processing, pressing boss and die inserts, dies and mandrels for forging machines, tools for the manufacture of screws, nuts and rivets.

TH-343 can be water cooled.

Hot moulding and heat treatment :

Hot forming::	1050 – 850 °C
Soft annealing::	800 – 820 °C / 4 h
Brinell-hardness after annealing::	max. 229 HB
Stress relieving::	650 °C
Preheating to hardening:	850 °C
Hardening temperature:	1000 – 1040 °C / air, oil or warm bath 450 – 500 °C
Tempering::	see tempering chart

Tempering chart:

Hardening: 1010 °C in oil
Tempering: 1h, air cooling
Average of samples ø25x50mm

