

# TH-714

Material no. 1.2714  
DIN 55NiCrMoV7

Hot wear resistance ★★☆☆☆☆  
Heat toughness ★★★★★☆

## Chemical composition

(Directional analysis in %)

C	Cr	Ni	Mo	V
0,55	1,10	1,70	0,50	0,10

## Description and applications:

TH-714 is a high-efficient die block steel for oil hardening with deep hardness penetration and highest high-temperature wear resistance for high pressure per unit of area.

Applications: dies of every size and cuts for forging hard steel as well as tools for forging machines, press saddles, jaws, tools for the manufacture of screws, nuts, rivets and bolts, hot die hobbing tools and hot shear blades.

For processing light and heavy-metal as tools for rod and tube extrusion, pressure plates, die holder at middle-thermal. Deliverable as requested in bars or forged ingots, annealed, but preferred tempered to strengths from 1000 to 1400 N/mm<sup>2</sup> (after an additional hardening and tempering made by the user up to 1600 N/mm<sup>2</sup>)

## Hot moulding and heat treatment:

Hot forming: 1050 – 800 °C  
Soft annealing: 650 – 680 °C / 4 h  
Brinell hardness after annealing: max. 248 HB  
Stress relieving: 650 °C  
Preheating to hardening: 650 °C  
Hardening temperature: 830 – 870 °C / oil, e pieces warm (100 - 150 °C) from the oil  
Tempering: see tempering chart

## Tempering chart::

Hardening: 840 °C in oil  
Tempering: 1h, air cooling  
Average of samples ø25x50mm

