

1.2767

Name:
45 NiCrMo 16

Material No.:
1.2767

Typical analysis in %:
C Cr Mo Ni
0.45 1.4 0.3 4.0

As-supplied condition:
Soft-annealed to max. 262 HB
(884N/mm²)

Characteristics:
Through-hardening steel with the highest toughness, low distortion, good polishability

General fields of application:
Solid coining dies for the highest toughness requirements, extremely highly loaded cutlery presses, tools for heavy cold forming, hobbing tools, shearing blades and cutters for cutting very thick material; plastic, compression and injection moulds, which require high hardness combined with the highest toughness

Special note:
Also available in ESR grade

Heat treatment data:

Temperature	Duration	Cooling
850 °C air cooling + 180 °C air cooling		

Physical characteristics:

Coefficient of thermal expansion: between 20 °C and:

10 ⁻⁶ x m	100	200	300	400	500	600	700 °C
m x K	11.8	12.5	12.8	13.1	13.4	13.8	13.6

Thermal conductivity: $\frac{W}{m \times K}$ $\frac{20}{28.0}$ $\frac{350}{30.5}$ $\frac{700}{32.0}$ °C

Normal working hardness: 50 - 56 HRC

Continuous time-temperature-transformation diagram

Tempering curve

