

# 40CrMnMoS8-6

W.Nr. 1.2312

## Properties

**mould steel, quenched and tempered, best machinability**  
enduse = mould frames, mould plates, mould frames for plastic and die casting moulds.

## Chemical composition

<b>C=0,35-0,45</b>	<b>Si=0,20-0,40</b>	<b>Mn=1,30-1,60</b>	<b>P=max.0,025</b>	<b>S=0,050-0,100</b>
<b>Cr=1,80-2,10</b>	<b>Mo=0,15-0,25</b>			

**DIN EN ISO 4957**

## Grade equivalents Similar grades

----- <b>BS</b>	----- <b>GB</b>	----- <b>AFNOR</b>	----- <b>JIS</b>	<b>19520</b>
<b>P20</b>	-----	-----	-----	<b>CSN</b>
<b>AISI / SAE</b>	<b>UNI</b>	<b>SS</b>	<b>GOST</b>	<b>UNE</b>

## General conditions

**Heat treatment** =+QT DIN EN ISO 4957

**Hardness** 280 - 325 HB

**Surface** surface flaws / cracks if any are removed by polishing.  
cleaning marks/scale pitting/peripheral decarburisation within the standard machining allowance is allowed.

**US test** SEP 1921 group 3, class D/d or  
EN 10228-3 quality grade 3, 100% scanning or  
specific FBH eq.

**Degree of Purity** DIN 50 602, K4 max. 20 ( inclusion SS not to be considered ! )

**Microstructue** quenched and tempered / fine - even structure

## Hot rolled and/or forged, peeled and/or turned

Ø 20 – 853 mm

**Tolerances** - 0 / + 0,8 - 4,0 mm ( dep. on dia ) or specific tol.  
**Lengths** 2,5 - 5,5 m or specific lengths ends of bars are sawn

## Hot rolled and/or forged, black Hot rolled and/or forged, all sides machined

20 x 20 -  
300 x 300 mm

**Tolerances** EN 10059 positiv allowance only or  
DIN 7527 / 6 positiv allowance only or  
specific tol.  
**Lengths** 2,5 - 5,5 m or specific lengths ends of bars are sawn

## Forged, black and/or forged all side machined

150 - 805 x  
150 - 1.500 mm

**Tolerances** DIN 7527 / 6 positiv allowance only or  
specific tol. positiv allowance only  
**Lengths** 2,5 - 5,5 m or specific lengths ends of bars are sawn

## Test certificate

EN 10204/3.1 with chem. Analysis; hardness HB ; heat treatment ; US test  
( copy of original on our letter head ! )

- supply range file - issued: 20.02.2009 rev. 1