

90MnCrV8

W.Nr. 1.2842

Properties

cold working tool steel - good hardenability, oil hardening steel
enduse = tools for cutting, punching, stamping, deep drawing; guide columns
moulds (compression - injection)

Chemical composition

C=0,85-0,95	Si=0,10-0,40	Mn=1,80-2,20	P=max.0,030	S=max.0,020
Cr=0,20-0,50	V=0,05-0,20			

DIN EN ISO 4957

Grade equivalents Similar grades

BO 2	-----	90MV8	-----	19313
BS	GB	AFNOR	JIS	CSN
O 2	90MnVCr8 KU	-----	-----	F.5229
AISI / SAE	UNI	SS	GOST	UNE

General conditions

Heat treatment =+A DIN EN ISO 4957

Hardness max. 229 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

Microstructue soft annealed struture / fine / even

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

Ø 10 – 503 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, black and/or Hot rolled all sides machined

10 - 125 x
30 - 610 mm

Tolerances EN 10058 positiv allowance only or
DIN 50602 positiv allowance only 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, black all sides machined

20 x 20 -
305 x 305 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

100 - 405
120 - 1.250 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