

X210CrW12

W.Nr. 1.2436

Properties

cold working tool steel; very good hardenability, wear resistance
enduse = cutting tools; shearing knives; rollers; deep drawing tools;
drawing mandrels; extrusion dies; nozzles for sandblasting

Chemical composition

C=2,00-2,30	Si=0,10-0,40	Mn=0,30-0,60	P=max.0,030	S=max.0,030
Cr=11,00-13,00	W=0,60-0,80			

DIN EN ISO 4957

Grade equivalents Similar grades

----- BS	----- GB	Z210CW1201 AFNOR	----- JIS	19717 CSN
----- AISI / SAE	X215CrW121 KU UNI	2312 SS	----- GOST	F.5213 UNE

General conditions

Heat treatment =+A DIN EN ISO 4957

Hardness max. 255 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 C/c or
EN 10228-3 quality grade 2, 100% scanning or
specific FBH eq.

Degree of Purity DIN 50 602, K4 max. 30

Microstructure Carbide distribution as per Böhler classification Chart
AL011DE10.91 edition 1984, aiming max. acceptable figures:
diamter / thickness : up to 100 mm 3.3 ; 2.4 ; 1.4
100 - 250 mm 3.4 ; 1.5
251 - 400 mm 4.3 ; 3.5 ; 2.6

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

Ø 10 – 453 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 - 105 x
20 - 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

10 x 10 -
305 x 305

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 - 250 x
120 - 600 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