

1.2311

stock sizes [mm]

flat bars, squares, blocks

to 1000 mm width and 600 mm thickness; cut to required size (toughened to 30 HRC)

Description:

heat treated steel to reach approx. hardness of 30 HRC, good machinability, good for texturing, very good polishability (better than 1.2312)

Application:

injection moulds, plastic mould bodies and inserts and pressure high gloss moulds

Chemical composition [%]

C	Mn	Si	P	S	Cr	Ni	Mo	W	V	Co	Cu
0,35-0,45	1,3-1,6	0,2-0,4	max 0,03	max 0,03	1,8-2,1	-	0,15-0,25	-	-	-	-

Equivalents

PN	W. nr	EN	AISI	Russia (GOST)	Other
-	1.2311	40CrMnMo9	P20	-	M201

Processes

nitriding	YES	
hardening	YES	temp. 890 - 900 [°C]
tempering	YES	temp. 450 - 600 [°C]

Hardness

after toughening	54 HRC
after softening	240 HB