

40H (1.7035)	stock sizes [mm]
--------------	------------------

round bars	from Φ 20 mm to Φ 500 mm diameter
sheets	from 3 mm to 140 mm thickness
flat bars and squares	from 20 mm to 500 mm width and to 60 mm thickness; cut to any length.

Description:

Chromium toughening steel; weldable and easily machinable,

Application:

axles, crankshafts, gear wheels, levers, connecting rods, components of bodies and tool grips, connecting elements, grinding wheels; after surface hardening for shafts, mandrels

Chemical composition [%]

C	Mn	Si	P	S	Cr	Ni	Mo	W	V	Co	Cu
0,36-0,45	0,5-0,9	0,17-0,37	max 0,035	max 0,035	0,8-1,2	max 0,3	max 0,1	max 0,2	max 0,05	-	max 0,25

Equivalents

PN	W. nr	EN	AISI	Russia (GOST)	Other
40H	1.7035	41Cr4	5140	40Ch	-

Processes

welding	NO	
forging	YES	
rolling	YES	
nitriding	YES	
hardening	YES	temp. 820 - 870 [°C]
tempering	YES	temp. 500 - 670 [°C]

Hardness

after toughening	max 55 HRC
after softening	240 HB
Rm	980 MPa
Re	780 MPa