

36HNM (1.6511)
stock sizes [mm]

round bars

 from Φ 20 mm to Φ 320 mm diameter; also toughened to 30 HRC

Description:

Toughening steel

Application:

crankshafts of aircraft engines, driving shafts, large-sized turbine components, gear wheels, connecting rods, pump and press shafts, steering elements, steam turbine shafts, rings

Chemical composition [%]

C	Mn	Si	P	S	Cr	Ni	Mo	W	V	Co	Cu
0,32-0,40	0,5-0,8	0,17-0,37	max 0,035	max 0,035	0,9-1,2	0,9-1,2	0,15-0,25	-	-	-	max 0,3

Equivalents

PN	W. nr	EN	AISI	Russia (GOST)	Other
36HNM	1.6511	36CrNiMo4	6342 H	40ChGNM	-

Processes

welding	YES	
forging	YES	
rolling	YES	
nitriding	YES	
hardening	YES	temp. 820 – 860 [°C]
tempering	YES	temp. 540 – 680 [°C]

Hardness

after softening 190 HB