



+48 801 00 31 31

akrostal@akrostal.pl

Nazwa gatunku: 30HGS

Nazwa: TOUGHENING AND STRUCTURAL ALLOY STEEL

NORM: PN-89/H-84030/04

APPLICATION

Steel adjusted for loaded spindles, pins, gears, levers; parts of clouth, gear train, flanges and bushings, for high toughness components such as axles and shafts; compressor vane and aircraft structure pipes.

SEMI-FINISHED PRODUCTS

Kęsiska, kęsy i pręty walcowane na gorąco lub kute, odkuwki, blachy, taśmy

CHEMICAL COMPOSITION:

C	Mn	Si	P	S	Cr	Ni	Mo	V	W	Ti	Cu	Inne
0,28	0,80	0,90	Max	Max	0,80	Max	Max	Max	Max	Max	Max	
-	-	-	0,035	0,035	-	0,30	0,10	0,05	0,20	0,05	0,25	-
0,35	1,10	1,20			1,10							

MECHANICAL PROPERTIES:

Property	Symbol	Unit	After heat treatment
Ultimate tensile strength	R_m	MPa	≥ 1080

Yield stress	$R_e (R_{p0,2})$	MPa	≥ 830
Elongation	A	%	≥ 10
Reduction of area	Z	%	≥ 45
Impact energy	KV	J	≥ 45

Technological treatment processes:

Technological treatment processes		Possible application	Temperature, °C	
Hot forming	Forging	+	(1050 - 850)	
	Rolling	+	(1230 - 840)	
Treatment	Heat treatment	Quenching	+	860-880/o
		Tempering	+	500 - 650
	Precipitate strengthening	Supersaturation	-	-
		Ageing	-	-
	Annealing	Normalising	+	(870 - 890)
		Soft annealing	+	(680 - 720)
Thermochemical treatment	Carburising	-	-	
	Other	-	-	

INTERNATIONAL STEEL GRADES:

ISO		European Union		Russia	
-	-	-	-	~ 30ChGS	GOST 4543 1971
US		Japan		China	
-	-	-	-	~ 30CrMnSi	GB 3077-88