

ŁH15/1.3505/100CR6



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NAZWA GATUNKU: ŁH15/1.3505/100CR6

NAZWA: BEARING STEEL

NORM: EN ISO 683-17

APPLICATION

Steel susceptible to the elements of general purpose such as: rolling bearings, rings, balls, shafts, needles less than 30 mm in size, working at the temperature similar to the room temperature and without the exposure to corrosive environment.

TECHNOLOGICAL INFORMATION

Non-corrosion resistant steel

SEMI-FINISHED PRODUCTS

Non-corrosion resistant steel

CHEMICAL COMPOSITION:

C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Al	O
0,93-1,05	0,15-0,35	0,25-0,45	Max 0,025	Max 0,015	1,35- 1,60	Max 0,10	-	Max 0,30	Max 0,050	Max 0,0015

MECHANICAL PROPERTIES:

Hardness after		Unit	Value
Spheroidised annealing		HB	≤207
Spheroidised annealing and cold plastic deformation (e.g. drawing) ¹ pipes; ² wires		HB	≤241 ≤321 ¹⁾ ≤207 ²⁾
Quenching with 850 °C in oil		HRC	65
Quenching with 850 °C in oil and tempering	100	HRC	64
	150	HRC	63
	200	HRC	62
	250	HRC	59

PHYSICAL PROPERTIES:

Property	Unit	Value
Density, ρ	g*cm ⁻³	7.85
Linear expansivity, α _{20-100°C}	K ⁻¹	12,0*10 ⁻⁶

TECHNOLOGICAL TREATMENT PROCESSES:

Technological treatment processes			Possible application	Temperature, °C
Forming processes	Forging		+	1100-850
	Rolling		+	1100-850
Treatment process	Heat treatment	Quenching	+	830-870
		Tempering	+	150-170
	Precipitate strengthening	Supersaturation	-	-
		Ageing	-	-
	Annealing	Normalising	+	870-900
		Soft annealing	+	780-800
Thermochemical treatment	Carburising		-	-
	Other		-	-

INTERNATIONAL STEEL GRADES:

ISO		EN		Russia	
100Cr6	ISO 683-17:1999	100Cr6	ISO 683-17:1999	ShH15	GOST 801-78
US		Japan		China	
52100	ASTM A 295-98	~SUJ 2	JIS G 4805-1999	GCr15	GB 3203-82