



Datasheet of product

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Product information

Product: Alloyed Steel Rods
 Standard: DIN1013
 Manufacturing process: Hot Rolled in 1100 - 850°C and normalizing in 870 - 900°C/air

Material designation

Material standard	Europe	Germany		USA	France	Italy	Grait Britain	Sweden	Japan
	EN	DIN	WR	AISI/SAE/ASTM	AFNOR	UNI	BS	SS	JIS
100Cr6	100Cr6	-	1.3505	52100	-	-	2S135	2258	-
1060	C60E	Ck60	1.1221	1060	XC60	C60	060A62	1678	S58C
70Cr2	70Cr2	70Cr2	1.2007	-----	-----	-----	-----	-----	-----

- Any other material could be rolled upon customer request.

Chemical composition

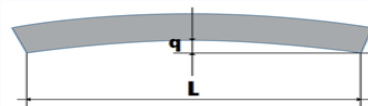
Material	%C	%Cr	%Mn	%Si	%P	%S	%Cu	%Ni	%Mo	%Sn
100Cr6	0.98-1.05	1.35-1.60	0.25-0.40	0.20-0.35	≤0.020	0.003-0.008	≤0.30	≤0.20	≤0.06	≤0.06
1060	0.57-0.65	≤0.4	0.60-0.90	≤0.4	≤0.03	≤0.035	≤0.30	≤0.4	≤0.1	≤0.06
70Cr2	0.65-0.75	0.55-0.70	0.75-0.90	0.20-0.30	≤0.03	≤0.03	≤0.30	≤0.4	≤0.1	≤0.06

Diameters and tolerances

Conditional diameter	Manufacturing process	Deviation limit on diameter - mm	Maximum permissible oval shape - mm	Cross-Sectional area Cm ² /m	Weight Kg/m	Surface area Cm ² /m
20	Hot Rolled	±0.4	0.65	3.14	2.47	628
25	Hot Rolled			4.91	3.85	785
30	Hot Rolled			7.07	5.55	942
35	Hot Rolled	±0.6	1.00	9.62	7.55	1100
40	Hot Rolled			12.6	9.86	1260
45	Hot Rolled			15.9	12.5	1410
50	Hot Rolled	±0.8	1.3	19.6	15.4	1570
55	Hot Rolled			23.8	18.7	1730
60	Hot Rolled			28.3	22.2	1880
65	Hot Rolled	±1.0	1.6	33.2	26.0	2040
70	Hot Rolled			38.5	30.2	2200
80	Hot Rolled			50.3	39.5	2510
90	Hot Rolled	±1.3	2.1	63.6	49.9	2830
100	Hot Rolled			78.5	61.7	3140
110	Hot Rolled			95	74.6	3460
120	Hot Rolled	±1.5	2.5	113	88.8	3770
150	Hot Rolled			177	139	4710

Straightness

Nominal Diameter (mm)		Permissible deviation from straightness (q)
---	25≤	Not stipulated
25	80≤	0.004.L
80	150≤	0.0025.L



Metallographic analysis

The structure is tempered martensitic with low percentage of austenite.

Pictures

