

DATA SHEET



Material:

Chrome 25 microns ± 5 , 9/120 h ISO 10289

**NOTE BLUE MARKED RODS ARE USUALLY IN STOCK IN 1 METER LENGTH
OTHERS ARE AVAILABLE ON REQUEST**

CODE	Ø (mm)	(Kg/m)	CODE	Ø (mm)	(Kg/m)	CODE	Ø (mm)	(Kg/m)
14700	6	0,22	14713	36	7,99	14728	85	44,54
14701	8	0,39	14714	38	8,9	14729	90	49,94
13339	10	0,62	11510	40	9,86	14730	95	55,64
14702	11	0,75	14715	42	10,88	14731	100	61,65
14703	12	0,89	11511	45	12,48	14732	105	67,97
14704	14	1,21	14716	46	13,05	14733	110	74,6
14705	15	1,39	14717	48	14,2	14734	115	81,54
13004	16	1,58	11512	50	15,41	14735	120	88,78
14706	17	1,78	14718	52	16,67	14736	125	96,33
14707	18	2	14719	55	18,65	14737	130	104,19
14708	19	2,23	14720	56	19,33	14738	140	120,84
11506	20	2,47	13005	60	22,19	14739	145	129,62
14709	22	2,98	14721	63	24,47	14740	150	138,72
14710	24	3,55	14722	65	26,05	14741	160	157,83
11507	25	3,85	14723	68	28,51	14742	170	178,18
14711	28	4,83	14724	70	30,21	14743	180	199,75
11508	30	5,55	14725	75	34,68	14744	190	222,56
14712	32	6,31	14726	77	36,55	14745	200	246,61
11509	35	7,55	14727	80	39,46			

MATERIAL LEGEND

MARKING	MATERIAL / TREATMENT	DESCRIPTION AND PROPERTIES
C45	Structural carbon steel	Standard version, good machinability and mechanical properties
C45 I.H	C45 + induction hardened	Surface hardened steel with increased wear resistance
20MnV6	Microalloyed steel	High strength, suitable for hydraulic rods
42CrMo4 Q+T	Quenched and tempered alloy steel	Hardened and tempered steel with high strength and toughness
42CrMo4 Q+T I.H	Quenched and tempered + induction hardened	Very high load capacity, hard surface and excellent wear resistance
I.H	Induction Hardened	Induction hardened surface (increased surface hardness)
Q+T	Quenched & Tempered	Heat treated (quenched and tempered) for higher strength

Standard with purchase C45, other materials upon request.

MECHANICAL PROPERTIES

STEEL GRADE	DIAMETER Ø (mm)	TENSILE STRENGTH RM (N/mm ²)	ELONGATION A5 (%)	NORM
C45E	6 < Ø ≤ 16	min. 710	min. 6	-
	16 < Ø ≤ 25	min. 650	min. 7	-
	19 < Ø ≤ 100	min. 580	min. 16	-
	100 < Ø ≤ 200	min. 560	min. 16	-
20MnV6	6 < Ø ≤ 19	min. 700	min. 10	-
	19 < Ø ≤ 80	min. 600	min. 18	-
	80 < Ø ≤ 160	min. 550	min. 18	-
38MnVS6	20 < Ø ≤ 160	800 - 950	min. 12	-
42CrMo4+QT	6 < Ø ≤ 16	1100 - 1300	min. 10	-
	16 < Ø ≤ 40	1000 - 1200	min. 11	-
	40 < Ø ≤ 100	900 - 1100	min. 12	-
	100 < Ø ≤ 160	800 - 950	min. 13	-
42CrMo4+QT	160 < Ø ≤ 200	750 - 900	min. 14	-



DIAMETER TOLERANCE	ISO F7 / OTHER ON REQUEST
ROUNDNESS	max. 1/2 OF DIAMETER TOLERANCE
SURFACE ROUGHNESS	RA: max. 0.20 μm
CHROME THICKNESS	$\varnothing < 20 \text{ mm}$: min. 15 μm
	$\varnothing \geq 20 \text{ mm}$: min. 20 μm
CHROME LAYER HARDNESS	min. 900 HV0.1
STRAIGHTNESS	$\varnothing \leq 16 \text{ mm}$: max. 0.3 mm/1000 mm
	$\varnothing > 16 \text{ mm}$: max. 0.2 mm/1000 mm

DIMENSIONS AND TOLERANCES

DIAMETER \varnothing (mm)	ISO F7 (μm)
$\varnothing = 6$	-10 / -22
$6 < \varnothing \leq 10$	-13 / -28
$10 < \varnothing \leq 18$	-16 / -34
$18 < \varnothing \leq 30$	-20 / -41
$30 < \varnothing \leq 50$	-25 / -50
$50 < \varnothing \leq 80$	-30 / -60
$80 < \varnothing \leq 120$	-36 / -71
$120 < \varnothing \leq 180$	-43 / -83
$180 < \varnothing \leq 200$	-50 / -96

