

Chrome plated bars CP (THALACHROME S) and induction hardened chrome plated bars IHC (THALACHROME SI) available in 50 KSI, 65 KSI, 75 KSI, 85 KSI, 100 KSI min yield strength. Steel grades correspondents ASTM: 1045, 15V40, A572, 4140.

Chrome plated thickness: .000787" minimum [ 20 µm]

**Length of the bars**

Diameters: 3/4" - 5" | 20' to 24' R/L [ 6.0 m to 7.3 m ]

**Induction Hardened surface Hardness**

KSI	Surface Hardness (Hrc)
50 KSI - 75 KSI - 85 KSI - 100 KSI	55 to 60
65 KSI	42 to 52

**Induction Hardened Depth of Hardness**

Range size	Depth of hardness
Ø 3/4" to Ø 1-5/8"	.039" to .078" (1,0 to 2,0 mm)
Ø 1-5/8" to Ø 3-1/4"	.049" to .098" (1,25 to 2,50 mm)
Ø 3-1/4" to Ø 4-1/2"	.078" to .11" (2,0 to 3,0 mm)

**Tolerance**

Diameters	3/4" to 1-1/8"	1 1/4" to 1-7/8"	2" to 3"	3-1/4" to 4-1/2"	5"
Tolerance f7	-.000787" to -.00161"	-.000984" to -.00196"	-.00118" to -.00236"	-.00141" to -.00279"	-.00169" to -.00326"
	(-0,020 to -0,041 mm)	(-0,025 to -0,050 mm)	(-0,030 to -0,060 mm)	(-0,036 to -0,071 mm)	(-0,043 to -0,083 mm)

Product	Yield Strength	Size Range
Thalachrome S 50	50 KSI (C45E)	3/4" to 5"
Thalachrome S 65	65 KSI (20MnV6)	3/4" to 5"
Thalachrome S 75	75 KSI (38MnV6)	3/4" to 5"
Thalachrome S 85	85 KSI (38MnV6X)	3/4" to 5"
Thalachrome S 100	100 KSI (42CrMo4V)	3/4" to 5"
Thalachrome SI 50	50 KSI (C45E)	3/4" to 4-1/2"
Thalachrome SI 65	65 KSI (20MnV6)	3/4" to 4-1/2"
Thalachrome SI 75	75 KSI (38MnV6)	3/4" to 4-1/2"
Thalachrome SI 85	85 KSI (38MnV6X)	3/4" to 4-1/2"
Thalachrome SI 100	100 KSI (42CrMo4V)	3/4" to 4-1/2"

**Packaging:** All our hard chrome plated bars are packed in cardboard tubes or plastic sleeves. For container shipments the bars are double packed in semiflex (thick plastic packaging) to protect them from possible handling damage or humidity.

Ø mm	inch	kg/M
16		1,58
18		2,00
19,05	3/4	2,24
20		2,47
22		2,98
22,225	7/8	3,05
24		3,55
25		3,85
25,4	1	3,98
26		4,17
28		4,83
28,575	1 1/8	5,03
30		5,55
31,75	1 1/4	6,21
32		6,31
34		7,13
34,925	1 3/8	7,52
35		7,55
36		7,99
37		8,44
38		8,90
38,1	1 1/2	8,95
40		9,86
41,275	1 5/8	10,50
42		10,88
44,45	1 3/4	12,18
45		12,48
47,625	1 7/8	13,98
48		14,20
50		15,41
50,8	2	15,91
52		16,67
55		18,65
56		19,33
57,15	2 1/4	20,14
60		22,19
63		24,47
63,5	2 1/2	24,86
65		26,05
68		28,51
69,85	2 3/4	30,08
70		30,21
75		34,68
76,2	3	35,80
78		37,51
80		39,46
82,55	3 1/4	42,01
85		44,54
88,9	3 1/2	48,72
90		49,94
95		55,64
95,25	3 3/4	55,93
100		61,65
101,6	4	63,64
105		67,97
110		74,60
114,3	4 1/2	80,54
115		81,53
120		88,78
125		96,33
127	5	99,44
130		104,19
140		120,83
150		138,71
160		157,82

Inch : 25,4 mm      Foot : 304,8 mm  
 Mile : 1,6093 km      US Pound : 0,4536 kg

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# Uranie's piston rods is the Choice of Excellence

THALACHROMES STANDARD CHROME PLATED BARS  
THALACHROMESI INDUCTION HARDENED CHROME PLATED BARS



**Raw material**  
Raw material purchase is made according to approved-supplier specifications. Checks are carried out on the chemical analysis and mechanical properties of each heat.



**Quality control**  
Uranie International is certified ISO 9001. The exclusive manufacturing process developed is totally controlled by very strictly SPC (Statistical Process Control) guidelines. Streamlined production cycle, 4 chroming lines working 24 hours and 7 days. In House maintenance, no intermediate stock, only one cycle of production to avoid any contamination or invisible corrosion.



**Corrosion resistance**  
Uranie International is the hard chrome-plated bar producer with the best possible corrosion resistance on the market! Every order is tested for corrosion in a Neutral Salt Spray cabinet. The results are outstanding, no point of corrosion after 120 hours of ASTM B 117 NSS test (Rating 10).



**Machinability and weldability**  
Our hard chrome-plated bars are manufactured with carefully selected steel that can be machined and welded efficiently.



**Property of chrome layer**  
The chrome layer has a minimum thickness of .000787" and a micro-cracked structure which ensures a remarkable corrosion resistance and an excellent adherence of the chrome layer.



**Surface control**  
Uranie's hard chrome-plated bars surface condition triples the life expectancy of any seal! This ensures minor maintenance and fewer leaks.



**Environment**  
Hard chrome-plated bars are produced in a totally closed circuit. Uranie International complies with the most stringent European/French regulations regarding atmospheric discharge values.



**Uranie International uses the highest performance technologies to produce both standard and induction-hardened chrome plated bars.**

Continuous Quality Control procedures and State of the Art Technology have earned Uranie its excellent reputation world-wide.

Uranie International has been a leader in chrome plating since 1986, and fully controls every operation needed to provide the best hard chrome rods on the market today.

Our logistics capability ensures the best possible customer service. Uranie's product range encompasses a wide variety of steel grades, chemistries, sizes, and meets the many applications needs for manufacturers of piston rods, and similar components used throughout the fluid power industry.

Our experienced team will work with your customers or engineers to realize the most ambitious ideas they have.

**Thanks to our continuous investment program, Uranie International is the quality leader on the market.**

