

### Chrome plated Steel bars C45 Technical Properties.

- **Diameter Tolerance** Standard is ISO-f7. We can provide special tolerance at premium price.
- **Residual Magnetism** Standard is Max. 50 Gauss.
- **Roundness** – max ½ from the diameter tolerance (½ tol.f7).
- **Surface Roughness** is Ra = max 0.20 µm.
- **Surface Hardness** – Chrome Layer hardness is 800-1000 HV0,1.
- **Straightness** is max 0,3 [mm]/1000 [mm] .
- **Chrome Layer thickness** for  $\varnothing \leq 19.05$  [mm] is min. 15[µm] and for  $\varnothing > 20$ [mm] is minimum 20[µm].

### Chrome plated steel bars C45 corrosion resistance.

- Standard Corrosion Resistance for  $\Phi < 20$  is R9/120h and for  $\Phi \geq 20$  is R9/200h according to NSS tests.
- We can provide higher layer or double chrome layer at premium price.

### Corrosion Test standards table.

ISO9227	ASTM	DIN50021	Salt Spray Test
NSS	B117	SS	Neutral Salt Spray
AASS	B287	ESS	Acetic Acid Salt Spray

### Steel grade correspondents table.

EN	DIN	BS	AFNOR
C45	CK45	CK45	080N45

### Chemical Composition table C45 according to EN 10083-2 : 2006.

C	Si	Mn	P	S	Cr	Mo	Ni	Cr+Mo+Ni
0.42	Max	0.50	Max	Max	Max	Max	Max	Max
0.50	0.40	0.80	0.030	0.040	0.40	0.10	0.40	0.63

**Mechanical Properties table C45 according to EN 10083-2 : 2006.**

<b>Diameter</b> Ø (mm)	<b>Tensile Strength</b> Rm (N/mm <sup>2</sup> )	<b>Yeld Point</b> Rp02 (N/mm <sup>2</sup> )	<b>Elongation</b> A5 (%)	<b>Hardness Brinell</b> HB
<Ø≤16	Min. 710	Min. 500	Min.6	200 min
16<Ø≤19.05	Min. 650	Min. 410	Min.7	190 min
20<Ø≤100	Min. 580	Min. 305	Min.16	172 min
100<Ø≤250	Min. 560	Min. 275	Min.16	162 min
250<Ø≤500	Min. 540	Min. 240	Min.16	158 min

**Standard packaging is made with plastic sleeves or cardboard tubes (depending on the product's diameter).**

**As an Extra protection with additional cost we can provide also wooden boxes.**