



WINTRADE S.r.l.
CHROME PLATED BARS • STEEL TUBES • SPECIAL STEELS

HSW[®]46

Free-cutting steel
chromed bar

According to EN 10277-3:2008

Corrosion Resistance ISO 9227 NSS Rating 9 $\varnothing < 20 \text{ mm} = 120 \text{ h}$ $\varnothing \geq 20 \text{ mm} = 200 \text{ h}$

Chemical analysis

C	Mn	Si	P	S	Ni	Nb	Ca	Cu	Cr
0,42±0,50	0,50±1,10	0,00±0,40	0,00±0,06	0,15±0,35	0,00±0,40	0,00±0,025	0,00±0,030	0,00±0,10	0,00±0,40

Mechanical properties at room temperature drawn (+C)

Diameter \varnothing mm.	Rp0,2 min. N/mm ²	Rm N/mm ²	A min. %	AvRT J	HB
≤10	570	740 ÷ 980	5		224 ÷ 295
10< \varnothing ≤16	470	690 ÷ 930	6		210 ÷ 278
16< \varnothing ≤40	400	590 ÷ 760	7		175 ÷ 225
40< \varnothing ≤63	380	580 ÷ 730	8		172 ÷ 216
63< \varnothing ≤100	340	560 ÷ 710	8		166 ÷ 211
100< \varnothing ≤180	340	560 ÷ 710	8		166 ÷ 211

Tolerance: ISO f7

Range: diam. 2 - 180 mm

Surface roughness: Ra - max. 0,20 μm (statistical average 0,05 - 0,15 μm)

Chromium thickness: $\varnothing < 20 \text{ mm} = \text{min. } 15 \mu\text{m}$ $\varnothing \geq 20 \text{ mm} = \text{min. } 20 \mu\text{m}$

Chromium hardness: min. 900 HV 0,1

General properties and applications

HSW[®]46 Free-cutting steel chromed bar.

It can be used for a wide range of pneumatic and hydraulic applications. It replaces a whole range of standard steels (for example C45). The main features are: to drill deep holes, to optimise chip flute, to reduce the wear of the tools and an excellent productivity with lower costs.