

CHROME PLATED BAR – 38 MVS6

Chrome plated 38 MVS6 carbon-manganese-vanadium micro alloyed steel, has a tensile strength range of 800 – 950 Mpa, and a hard chrome plated surface of over 900 HV. Supplied cold drawn or smooth turned, precision ground, polished, chrome plated and given a final polish. The resultant surface finish is extremely smooth, with excellent wear resistance, and good corrosion resistance.

Typical Applications:

Medium to highly stressed hydraulic and pneumatic cylinders for mining and earth moving equipment, waste disposal transport, agricultural and food processing equipment, car jacks and transport lifting equipment, hoists, machine tools, compressors, mechanical tools and equipment etc.

Typical Hard Chrome Plating:

Hardness: 900-1100 HV (Rc65-69)
 Roughness: 0.10-0.30 micron
 Thickness: 15-30 microns

Size tolerance: to ISO f7 or as below.

Diameter	Tolerance
Up to 51mm	+0 / -0.025mm
Over 51 – 102mm	+0 / -0.050mm
Over 102mm	+0 / -0.075mm
Straightness	0.2 mm / m

Welding:

Can be readily welded, as per medium carbon unplated bar, following correct procedures.

Typical Analysis (Base Metal)

Carbon	0.34 – 0.41%
Silicon	0.15 – 0.80%
Manganese	1.20 – 1.60%
Vanadium	0.08 – 0.20%
Nitrogen	0.010 – 0.020%
Phosphorus	0.025% max
Sulphur	0.020 – 0.060%

Typical Properties (Base Metal)

Size Range Ø mm	18 – 125
Yield Strength Mpa	520 min
Tensile Strength MPa	800 – 950
Elongation %	12 min
Hardness HB	240 – 280

Typical properties are for guidance only.

Related specifications: (Base Metal)

EN10267-1998	1.1303 38MnVS6
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Typical Bar Lengths:

Up to 18mm Ø 2000 – 3600mm
 Over 18mm Ø 4000 – 7500mm
 NB. 100-150mm unplated at bar ends.

Packaging & Protection:

Each bar supplied in a cardboard tube.

Machinability:

Similar to medium carbon unplated bar, if machined beneath the chrome plating or at the unplated bar ends.

Welding Procedure:

Remove cardboard tube from H.A.Z.
 Low hydrogen electrodes recommended.
 Pre-heat at 200-300°C, and cool slowly.