Silver Steel

BS 1407 - Latest Edition

Chemical Composition

	Analysis Range (%)	Typical Analysis (%)
C	.95/1.25	1.13
Si	.40 max.	.22
Mn	.25/.45	.37
P	.045 max.	.014
S	.045 max.	.018
Cr.	.35/.45	.43

Size Range

Sophisticated computer stock forecasting techniques ensure that most lengths/diameters are available ex stock.

	Imperial	Metric
Diameter Range:	1/16" – 2"	2 – 50mm
Supplied in:	Boxes, 1 metre, 2 metre and 3 metre lengths	

Tolerance/Surface Finish

< 1"	± 0.00025"
1" ≤ 2"	± 0.0005"
< 25mm	+ 0/– 0.015mm
25mm ≤ 50mm	+ 0/– 0.025mm

The surface finish is better than 25µ inch (0.6 microns) cla.

Packaging

All Silver Steel pieces are sprayed in a lanolin solution to guard against corrosion and boxed in polycarbonate lined boxes for further protection.

All 1 metre, 2 metre and 3 metre lengths are packaged in stout cardboard tubes to prevent any damage in transit.

Heat Treatment

Hardening

Heat slowly to 760-800°C using the upper end of the temperature range for lower carbon contents and lower end of temperature range for higher carbon contents. Austenitize until the temperature is uniform. Quench into well agitated water.

The approximate quench hardness is 65 to 68 Rc.

Tempering

Temper immediately after hardening preferably before the tool reaches room temperature. Temper for a minimum of 1 hour at temperatures between 180-350°C, dependent upon the final hardness required.

See detail below.

Tempering Temperature/ Hardness Graph