Stainless Steel: ISO Tolerances for Stainless Steel Bar



ISO 286 Tolerances for stainless steel bar

TOLERANCES

~ The ISO tolerances shown are taken from ISO 286.

CONTACT

Address:

Unit 8, Petre Court Clayton Le Moors Accrington Lancashire BB5 5HY

Tel: +44 (0)1254 775133

Web: https://www.stainlessmetricstock.com/

REVISION HISTORY

Datasheet Updated 18 July 2019

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and $\,$ manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular $\ensuremath{\mathsf{I}}$ purpose, whether expressed or implied.

Advice given by the Company to any third party is given for that party's $% \left(1\right) =\left(1\right) \left(1\right) \left$ assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.



Diameters (mm)	Tolerance in mm for given Tolerance Number							
	6	7	8	9	10	11	12	13
> 1 - 3 inc.	0.007	0.009	0.014	0.025	0.040	0.060	0.090	0.140
> 3 - 6 inc.	0.008	0.012	0.018	0.030	0.048	0.075	0.120	0.180
> 6 – 10 inc.	0.009	0.015	0.022	0.036	0.058	0.090	0.150	0.220
> 10 – 18 inc.	0.011	0.018	0.027	0.043	0.070	0.110	0.180	0.270
> 18 - 30 inc.	0.013	0.021	0.033	0.052	0.084	0.130	0.210	0.330
> 30 - 50 inc.	0.016	0.025	0.039	0.062	0.100	0.160	0.250	0.390
> 50 - 80 inc.	0.019		0.046	0.074	0.120	0.190	0.300	0.460
> 80 – 120 inc.	0.022			0.087	0.140	0.220	0.350	0.540
> 120 – 180 inc.	0.025			0.100	0.160	0.250	0.400	0.630
> 180 – 250 inc.				0.115	0.185	0.290	0.460	0.720
> 250 - 315 inc.						0.320	0.520	0.810
> 315 – 400 inc.						0.360	0.570	0.890
> 400 – 500 inc						0.400	0.630	0.970
> 500						0.440	0.700	1.100

EXAMPLES:

 \mathbf{H} = All Minus tolerance e.g. 45 mm dia $\mathbf{H9}$ = +0/-0.062

J = Tolerance divided e.g. 45 mm dia J9 = +/-0.031

 \mathbf{K} = All Plus tolerance e.g. 45 mm dia $\mathbf{K9}$ = +0.062 / -0The K tolerance is usually only applied to larger diameter bars (Over 75mm)

H8 = Precision Ground

H9 = Bright Drawn

H10 = Smooth Turned