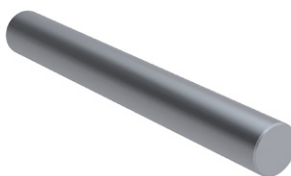




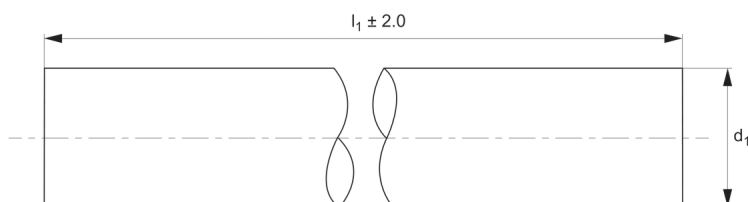
# Ø20 Stainless AISI 303 Shafts

soft

## Linear Shaft Bars



**L1773.20**



LINEAR SHAFT BARS

### Material

Stainless steel AISI 303 (1.4305, X10CrNiS18-19), surface finish 0.3-0.6µ Ra, ground and polished to 8-12 cla.  
1% Yield strength (Rp1.0): >=225 N/mm²,  
Tensile strength (Rm): 500-750 N/mm².

### Technical Notes

Tolerance, h6 standard, other tolerances

on request.

Straightness 0,2mm/m.

### Tips

Modifications, drilled and tapped holes, circlip grooves, special coatings etc. available.

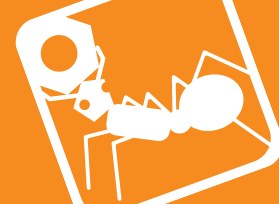
Shafts lengths are cut to typically ± 2mm.

To be used with ceramic or other bearings

not containing hardened ball bearings.

Order No.	d <sub>1</sub> tol. h6	l <sub>1</sub>	Tolerance µ tol. h6
L1773.20-0100	20	100	+0,-13
L1773.20-0150	20	150	+0,-13
L1773.20-0200	20	200	+0,-13
L1773.20-0250	20	250	+0,-13
L1773.20-0300	20	300	+0,-13
L1773.20-0350	20	350	+0,-13
L1773.20-0400	20	400	+0,-13
L1773.20-0450	20	450	+0,-13
L1773.20-0500	20	500	+0,-13
L1773.20-0550	20	550	+0,-13
L1773.20-0600	20	600	+0,-13
L1773.20-0650	20	650	+0,-13
L1773.20-0700	20	700	+0,-13
L1773.20-0750	20	750	+0,-13
L1773.20-0800	20	800	+0,-13
L1773.20-0850	20	850	+0,-13
L1773.20-0900	20	900	+0,-13
L1773.20-0950	20	950	+0,-13
L1773.20-1000	20	1000	+0,-13
L1773.20-1050	20	1050	+0,-13
L1773.20-1100	20	1100	+0,-13
L1773.20-1150	20	1150	+0,-13
L1773.20-1200	20	1200	+0,-13
L1773.20-1250	20	1250	+0,-13
L1773.20-1300	20	1300	+0,-13
L1773.20-1350	20	1350	+0,-13
L1773.20-1400	20	1400	+0,-13
L1773.20-1450	20	1450	+0,-13
L1773.20-1500	20	1500	+0,-13





Order No.	d <sub>1</sub> tol. h6	l <sub>1</sub>	Tolerance μ tol. h6
L1773.20-1550	20	1550	+0,-13
L1773.20-1600	20	1600	+0,-13
L1773.20-1650	20	1650	+0,-13
L1773.20-1700	20	1700	+0,-13
L1773.20-1750	20	1750	+0,-13
L1773.20-1800	20	1800	+0,-13
L1773.20-1850	20	1850	+0,-13
L1773.20-1900	20	1900	+0,-13
L1773.20-1950	20	1950	+0,-13
L1773.20-2000	20	2000	+0,-13
L1773.20-2050	20	2050	+0,-13
L1773.20-2100	20	2100	+0,-13
L1773.20-2150	20	2150	+0,-13
L1773.20-2200	20	2200	+0,-13
L1773.20-2250	20	2250	+0,-13
L1773.20-2300	20	2300	+0,-13
L1773.20-2350	20	2350	+0,-13
L1773.20-2400	20	2400	+0,-13
L1773.20-2450	20	2450	+0,-13
L1773.20-2500	20	2500	+0,-13
L1773.20-2550	20	2550	+0,-13
L1773.20-2600	20	2600	+0,-13
L1773.20-2650	20	2650	+0,-13
L1773.20-2700	20	2700	+0,-13
L1773.20-2750	20	2750	+0,-13
L1773.20-2800	20	2800	+0,-13
L1773.20-2850	20	2850	+0,-13
L1773.20-2900	20	2900	+0,-13
L1773.20-2950	20	2950	+0,-13
L1773.20-3000	20	3000	+0,-13
L1773.20-3050	20	3050	+0,-13
L1773.20-3100	20	3100	+0,-13
L1773.20-3150	20	3150	+0,-13
L1773.20-3200	20	3200	+0,-13
L1773.20-3250	20	3250	+0,-13
L1773.20-3300	20	3300	+0,-13
L1773.20-3350	20	3350	+0,-13
L1773.20-3400	20	3400	+0,-13
L1773.20-3450	20	3450	+0,-13
L1773.20-3500	20	3500	+0,-13
L1773.20-3550	20	3550	+0,-13
L1773.20-3600	20	3600	+0,-13
L1773.20-3650	20	3650	+0,-13
L1773.20-3700	20	3700	+0,-13
L1773.20-3750	20	3750	+0,-13
L1773.20-3800	20	3800	+0,-13
L1773.20-3850	20	3850	+0,-13
L1773.20-3900	20	3900	+0,-13
L1773.20-3950	20	3950	+0,-13
L1773.20-4000	20	4000	+0,-13
L1773.20-4050	20	4050	+0,-13
L1773.20-4100	20	4100	+0,-13
L1773.20-4150	20	4150	+0,-13
L1773.20-4200	20	4200	+0,-13
L1773.20-4250	20	4250	+0,-13
L1773.20-4300	20	4300	+0,-13
L1773.20-4350	20	4350	+0,-13
L1773.20-4400	20	4400	+0,-13
L1773.20-4450	20	4450	+0,-13
L1773.20-4500	20	4500	+0,-13
L1773.20-4550	20	4550	+0,-13
L1773.20-4600	20	4600	+0,-13
L1773.20-4650	20	4650	+0,-13
L1773.20-4700	20	4700	+0,-13
L1773.20-4750	20	4750	+0,-13
L1773.20-4800	20	4800	+0,-13
L1773.20-4850	20	4850	+0,-13
L1773.20-4900	20	4900	+0,-13



## Ø20 Stainless AISI 303 Shafts soft

## Linear Shaft Bars

Order No.	d <sub>1</sub> tol. h6	l <sub>1</sub>	Tolerance μ tol. h6
L1773.20-4950	20	4950	+0,-13
L1773.20-5000	20	5000	+0,-13
L1773.20-5050	20	5050	+0,-13
L1773.20-5100	20	5100	+0,-13
L1773.20-5150	20	5150	+0,-13
L1773.20-5200	20	5200	+0,-13
L1773.20-5250	20	5250	+0,-13
L1773.20-5300	20	5300	+0,-13
L1773.20-5350	20	5350	+0,-13
L1773.20-5400	20	5400	+0,-13
L1773.20-5450	20	5450	+0,-13
L1773.20-5500	20	5500	+0,-13
L1773.20-5550	20	5550	+0,-13
L1773.20-5600	20	5600	+0,-13
L1773.20-5650	20	5650	+0,-13
L1773.20-5700	20	5700	+0,-13
L1773.20-5750	20	5750	+0,-13
L1773.20-5800	20	5800	+0,-13
L1773.20-5850	20	5850	+0,-13
L1773.20-5900	20	5900	+0,-13
L1773.20-5950	20	5950	+0,-13
L1773.20-6000	20	6000	+0,-13

LINEAR SHAFT BARS



### Hardened steel linear shafting (L1770 – L1771)

Carbon steel to BS 070M55 hardened to 60-65 HRC. Carbon Steel B.S. 070M55 is a medium carbon steel which is used when greater strength and hardness is desired than in its as rolled condition. Extreme size accuracy, straightness and concentricity are combined to minimise wear in high speed applications. Suitable for use with all types of linear bushings.

### Corrosion resistant steel (L1772)

440C is a high carbon chromium martensitic stainless steel, generally supplied in the annealed condition with a maximum hardness of 50-55 HR<sub>C</sub>. Characterised by good corrosion resistance in mild domestic and industrial environments, including fresh water, organic materials, mild acids, various petroleum products, coupled with extreme high strength, hardness and wear resistance when in the hardened and tempered condition. Used for parts requiring a combination of excellent wear resistance, plus reasonable corrosion resistance. Typical applications are: ball bearings and races, bushings, cutlery, chisels, knife blades, pump parts, surgical instruments, valve seats etc. Material magnetic in all conditions. Suitable for use with all types of linear bushings.

### Stainless steel AISI 303 (L1773)

303 is a free machining chromium-nickel austenitic stainless steel with good strength and good corrosion resistance, as supplied in the annealed condition. Characterised by excellent machinability and non galling properties due to its higher sulphur content, which has the effect of slightly lowering its corrosion resistance. It is however, fairly resistant to general atmospheric corrosion, general foodstuffs, sterilizing solutions, dyestuffs, most organic chemicals, plus some inorganic chemicals. But has very limited resistance to acids. 303 cannot be hardened by thermal treatment, but strength and hardness can be increased substantially by cold working, with subsequent reduction in ductility. It is used primarily for production runs involving extensive machining, or complex parts requiring excellent machinability. Typical uses are: architectural components, food processing equipment, dairy equipment, dyeing industry, hardware and kitchenware manufacturing and allied industries. Commonly used to manufacture bolts and nuts, bushes, gears, shafts, valve bodies and fittings etc. Material is non magnetic in the annealed condition, but can become mildly magnetic following heavy cold working. Annealing is required to rectify if necessary.

**Not suitable for use with linear ball bushings, please use ceramic bearings.**







### Stainless steel AISI 303 (L1774)

316 is a chromium-nickel-molybdenum austenitic stainless steel with good strength and excellent corrosion resistance, as supplied in the annealed condition. Characterised by high corrosion resistance in marine and industrial atmospheres, it exhibits excellent resistance to chloride attack and against complex sulphur compounds employed in the pulp and paper processing industries. The addition of 2% to 3% of molybdenum increases its resistance to pitting corrosion and improves its creep resistance at elevated temperatures. Also it displays good oxidation resistance at elevated temperatures and has excellent weldability. AISI 316 cannot be hardened by thermal treatment, but strength and hardness can be increased substantially by cold working, with subsequent reduction in ductility. It is used extensively by the marine, chemical, petrochemical, pulp and paper, textile, transport, manufacturing and allied industries. Typical uses are: architectural components, textile equipment, pulp and paper processing equipment, marine equipment and fittings, photographic equipment and x-ray equipment etc. Material non magnetic in the annealed condition, but can become mildly magnetic following heavy cold working. Annealing is required to rectify if necessary.

**Note: Optimum corrosion resistance is achieved in the annealed condition. Not suitable for use with linear ball bushings; please use ceramic bearings.**



## Linear Shafts from Automation Components

<p><b>L1770 - Hardened steel shafts</b></p>  <p>For use with linear bearings.</p> <p>Ø6 to Ø60</p>	<p><b>L1771 - Hardened hollow shafts</b></p>  <p>For use with linear bearings. Hollowed for lighter weight.</p> <p>Ø12 to Ø50</p>
<p><b>L1772 - Hardened Stainless shafts</b></p>  <p>For use with linear bearings Anti-corrosion.</p> <p>Ø6 to Ø60</p>	<p><b>L1773 - Stainless 303 shafts</b></p>  <p>Soft stainless, high anti-corrosion. Not for use with ball bush linear bearings.</p> <p>Ø6 to Ø60</p>
<p><b>L1774 - Stainless 316 shafts</b></p>  <p>Soft stainless, very high anti-corrosion. Not for use with ball bushing linear bearings.</p> <p>Ø6 to Ø60</p>	<p><b>L1778 - Aluminium shafts</b></p>  <p>Light weight, non-magnetic.</p> <p>Ø10 to Ø50</p>