

SPLINE SHAFTS FOR TORQUE RESISTING BUSHES

Our induction hardened steel spline shafts have four gothic arch profiled grooves to accept the balls from the spline nuts SSP, SPF and SPR.

Two types of spline shafts are available:

Ground Spline Shaft

Type SP..S when high precision and/or high pre-load is required.

Three levels of pre-load are available: Zero, Light (suffix T1) or Medium (suffix T2).

Tolerance for twist is 13μ per 100mm on standard types.

Tolerance for twist is 6μ per 100mm on precision types (P).

Straightness values are given in the table below.

Drawn Spline Shaft

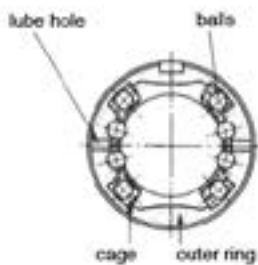
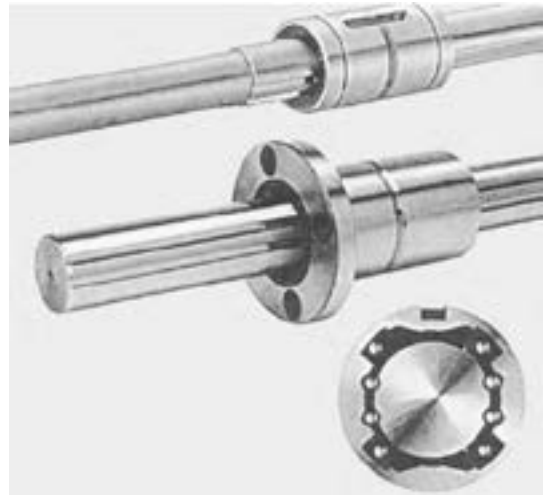
Type SP..C when normal precision level is required.

Available from size 20 to 50 and only without pre-load.

Tolerance for twist is 100μ per 100mm.

Straightness tolerance is 1mm per 1000mm.

The load capacities for drawn spline shafts are only 70% of the values for ground splines shafts.



Ball race design



PART	d (h7)	Max length (mm)	Standard Straightness (μ m/m)	Precision Straightness (μ m/m)	No Preload (μ m)		Light Preload T1 (μ m)		Medium Preload T2 (μ m)	
SP04S	4	300	160	110	-2	1	-6	-2	N/A	N/A
SP06S	6	400	160	110	-2	1	-6	-2	N/A	N/A
SP08S	8	500	160	110	-2	1	-6	-2	N/A	N/A
SP10S	10	630	100	65	-3	1	-9	-3	N/A	N/A
SP14S	13	1500	75	50	-3	1	-9	-3	-13	-7
SP16S	16	1500	75	50	-3	1	-9	-3	-13	-7
SP20S	18.2	2000	170	120	-4	2	-12	-4	-20	-12
SP25S	23	2000	170	120	-4	2	-12	-4	-20	-12
SP30S	28	2000	170	120	-4	2	-12	-4	-20	-12
SP40S	37.4	2000	120	80	-6	3	-18	-6	-30	-18
SP50S	47	2000	120	80	-6	3	-18	-6	-30	-18
SP60S	56.5	2000	90	60	-6	3	-18	-6	-30	-18