

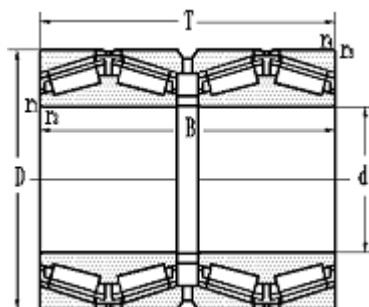
TAPER ROLLER BEARINGS

Taper roller bearings are separate bearings. the inner ring with roller and cage form the inner components, and can be **mounted** separately with outer ring. It has **tapered** raceway on inner and outer ring, and tapered rollers are mounted between the raceways.such bearing are mainly used to bear the combination load of radial and axial. The **axial** carrying capacity of the bearing is depended on the contact angle α (the outer raceway angle).the larger the α ,the higher the **axial** carrying capacity of the bearing . This bearing can be **classified** into single-row,double-row and four-row taper roller bearing according to rows of rollers.

The performance of Four-row taper roller bearing is more or less the same with the double-row taper roller bearing,and can bear larger radial load,but its limit rotating speed is lower.it is mainly used in heavy machinery,for instance,the **working roll of rolling mill and backup roll ,etc.**

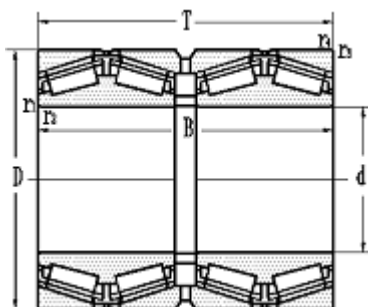
Taper roller bearing use **pressed steel plate cage,but when the size is larger,it will adopt the machined solid cage , which is welded with supporting rollers(each roller has a supporting hole in its radial center) .**

FOUR ROW TAPER ROLLER BEARINGS d200-360mm



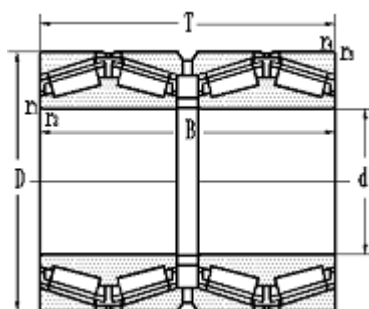
d	Principal dimensions					Basic load ratings		Old spec.	Designations	weight
	D	T	B	R _{min}	r _{min}	Dyc Cr	stc cor			
mm						KN				kg
200	310	200	200	3	2.5	1970	4520	77740	77740	55.6
	310	275	275	3	2.5	1230	4200	2077140	-	75.1
205	320	205	205	4	3	1060	2850	77741	77741	55.4
220	340	305	305	4	3	2457	5974	2077144E	2077144E	100.8
240	360	310	310	4	3	3300	7210	2077148	2077148	90.5
241.478	349.148	228.6	228.6	1.5	3.3	1732	4387	-	330782A	70.4
250	385	255	255	3	3	2127	4948	3-703	380650	107.8
	460	270	270	4	4	3040	5726	77750Y	77750Y	196
260	360	265	265	3	3	1990	5770	2077952	382952	80
	400	255	255	5	5	2109	4957	77752	381052X2/HC	123
	400	345	345	5	4	2850	7700	-	382052	161
	440	300	300	2	5	2715	5968	777752	777752	164
226.7	355.6	228.6	230188	1.5	3.3	1780	5340	-	330822B	62.8
280	420	250	250	5	5	1540	5300	77756	-	119
	460	324	324	5	4	3780	8560	1077756	381156	215.7
300	460	390	390	5	4	3850	10200	2077160	-	222
320	480	380	380	5	4	3000	11500	2077164	-	252
340	460	310	310	4	4	2200	9300	2077968	-	147
	520	325	325	5	4	3200	8200	-	381068	247
330.2	508	307.975							3806/330.2	232
360	480	375	375	4	4	2550	11800	77872	-	197
	600	420	420	4.7	4.7	3950	13500	1077772	1077772	388

FOUR ROW TAPER ROLLER BEARINGS d380-600mm



Principal dimensions						Basic load ratings		Old spec.	Designations	weight
d	D	T	B	R _{min}	r _{min}	D _{yc} Cr	s _c cor			
mm						KN				kg
380	550	350	330	5	5	3800	10000	77776	-	271
	620	388	388	6	6	3450	11600	3077776	-	443
	620	420	420	5	4	5050	12600	1077776	381176	485
395	545	288.7	268.7	10	10	2361	6558	77779	-	191
400	540	280	280	3.7	7.5	2450	6500	77880	-	187
	540	400	400	5	5	6350	13300	-	380680	262
	600	356	356	5	4	3400	12400	-	381080	345
420	560	437	437	5	5	7180	16300	-	380684	298
	700	480	480	6	5	9550	18200	1077784	381184	755
440	620	454	454	6	6	6050	18800	77888	-	432
	650	355	355	6	6	5040	12390	77788	-	385
460	620	310	310	4	3	4150	11615	1077992	381992	252
	650	474	474	6	6	4500	12000	77892	-	506
	730	440	440	4	7.5	5600	14800	-	381192	663
480	700	420	420	6	5	5350	15500	77196	-	535
490	625	385	385	7	4	4900	16500	-	380698	278
530	780	450	450	6	5	6550	18200	-	3810/530	745
540	690	400	400	5	5	5700	11400	779/540	-	375
560	750	368	368	5	4	7850	15800	-	3819/560	447
	920	620	620	7.5	6	18200	32000	-	3811/560	1690
600	800	365	365	5	5	4000	18100	779/600	-	489
	800	380	380	5	4	4000	18100	10777/600	-	497

FOUR ROW TAPER ROLLER BEARINGS d600-750mm



d	Principal dimensions					Basic load ratings		Old spec.	Designations	weight
	D	T	B	R _{min}	r _{min}	D _{yc} C _r	s _c c _{or}			
mm						KN				kg
600	870	480	480	6	6	6150	25500	-	3810/600	992
	980	650	650	7.5	7.5	9650	37500	10777/600	-	1970
630	850	418	418	6	6	5000	22100	-	3819/630	682
	920	515	515	7.5	7.5	6550	27500	771/630	-	1190
	1030	670	670	7.5	6	15000	42000	-	3811/630	2200
640	1030	560	560	7.5	12	16000	39300	777/640	-	1770
650	1030	560	560	7.5	12	14620	35515	777/650	-	1720
670	900	412	412	6	6	5250	24600	10779/670	-	773
710	900	410	410	3	6	5350	27500	779/710	-	650
750	1220	840	840	9.5	9.5	16100	68500	10777/750	-	3985