
Four-row Cylindrical Roller Bearings for Rolling Mills

The harsh operating environment of the steel or metallurgical industry places extremely high requirements on the equipment. Guaranteeing continuous operation and reducing downtime is indispensable for wire rolling mills or rod rolling mills, where performance and reliability are critical.



The **key problems** in the application of four-row cylindrical roller bearings in rolling mill equipment:

1. **How to improve the effective life of four-row cylindrical roller bearings used for rolling mills?**
2. **How to ensure the accuracy of rolled products?**

TEDIN' s precision four-row cylindrical roller bearing **features**:

1. Improved effective life:

The machined steel cage can reduce wear, and the surface carburized raceways and rollers can effectively resist the impact load and fatigue cracking.

We optimized the **roller profile - with the logarithmic crown profile**, which effectively improves the fatigue wear between the rollers and the raceway, and increases the service life.

2. High precision grade:

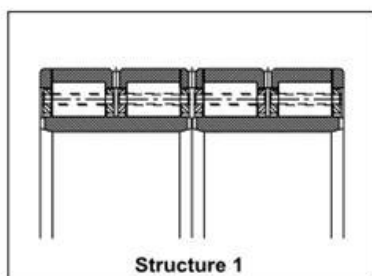
Grade P5, P4. High dimensional accuracy, rotation accuracy, and better roughness of rollers and raceways.

3. Improved installation:

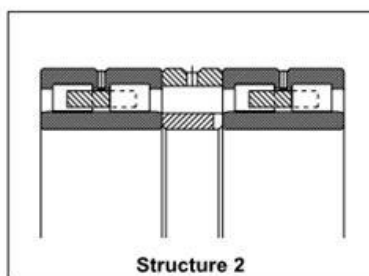
To reduce roller sinking and larger inner ring chamfers make installation easier and reduce the risk of bearing damage during roll changing operations.

How to choose the suitable structure of four-row cylindrical roller bearings?

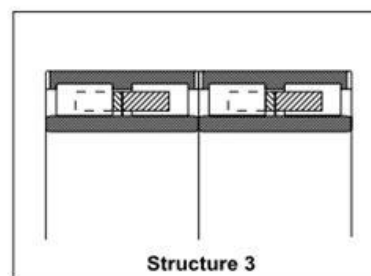
There are different structures of four-row cylindrical roller bearings used for roll neck support. Which type will be used in specific cases depends on the rolling stand design.



3: Four-row cylindrical roller bearing with through-bored rollers and so-called pin-type cages



4: Double-row cylindrical roller bearings of dimensional series 49 with inner and outer spacers



5: Four-row cylindrical roller bearing with machined cage for high rolling speed

Structure 1:

Composition: four rows of through-bored rollers, pin-type cages, one-piece outer ring, two pieces inner rings, and one inner spacer.

Application:

This structure helps the bearing to have the maximum number of rollers, especially in larger-size four-row cylindrical roller bearings, and provides an optimum load-carrying capacity. The pin-type cage offers a high strength which is particularly important for roll neck bearings which are subjected to great acceleration and deceleration – e.g. in reversing mills.

Structure 2:

Composition: four-row rollers, machined brass or steel cages, two pieces outer ring, two pieces inner ring, one inner spacer, and one outer spacer.

This structure is actually a composite of two double-row cylindrical roller bearings of dimensional series 49 with inner and outer spacers.

Application:

They are used mainly for work rolls, and must be suitable for high speeds. Different from structure 1, the load-carrying capacity of these bearings in this structure is of secondary importance. This structure helps the four-row cylindrical roller bearings to reduce stress resulting from possible tilting moments.

Structure 3:

Composition: four-row rollers, machined brass or steel cages, one-piece outer ring, two-piece inner ring.

Application:

Bearings in this structure are used generally in wire mills. They feature machined brass or steel cages. They are not only suitable for high speeds, but also can accommodate high loads.

Products Range:

Diameter: 80 - 1200mm



LUOYANG TEDIN BEARING CO., LTD.

Tel: 0086-136-63889399;

Email: sales@tedin-bearing.com;

Homepage: www.tedin-bearing.com;

If you don't find the suitable dimensions you need, please contact us for specifics. We can design and send you the drawings according to your requirements.

Catalog:

d (mm)	D (mm)	B (mm)	Weight(kg)	TIMKEN number	SKF number	FAG number	NSK number
145	225	156	23	145RYL1452	313924	538522	145RV2201
160	230	130	16.8	160RYL1468	314190	502894	N/A
160	230	168	23.1	160RYL1467	315189	510150	N/A
165.1	225.425	168.275	19.6	165RYL1451	315642	529468	N/A
180	260	168	29.7	180RYL1527	313812	507536	180RV2601
200	270	170	27.9	200RYL1544	314553	522742	N/A
200	280	170	32.4	200RYL1566	314385	507344	N/A
200	280	200	39	200RYL1567	313893	508726	200RV2802
200	290	192	41.8	200RYL1585	313811	512580	200RV2901
220	310	192	45.1	220RYL1621	313839	507333	N/A
230	330	206	58.3	230RYL1667	313824	508727	230RV3301
260	370	220	107.6	260RYL1744	313823	507336	260RV3701
280	390	220	81.9	280RYL1783	313822	507339	280RV3901
280	390	275	100.7	280RYL1782	314719	527104	280RV3903
300	420	300	131.9	300RXL1845	314484	524289	300RV4221
340	480	350	201.3	340RYL1963	314485	527634	340RV4801

Cylindrical Roller Bearing

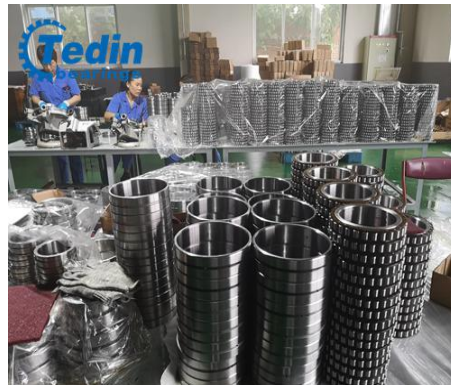
Tedin is a professional manufacturer of precision cylindrical roller bearings with 16 years. Our products widely used in high-speed railway, aircraft engine, wind turbine gearbox, machine tools, rolling mills, etc.

Some of our famous customers for your reference: SKF, IKO, ZWZ, TMB, LYC, ZYS, etc.

Single row cylindrical roller bearing, standard types or customized types:



Double row cylindrical roller bearing, standard types or customized types, widely used for machine tools and rolling mills:





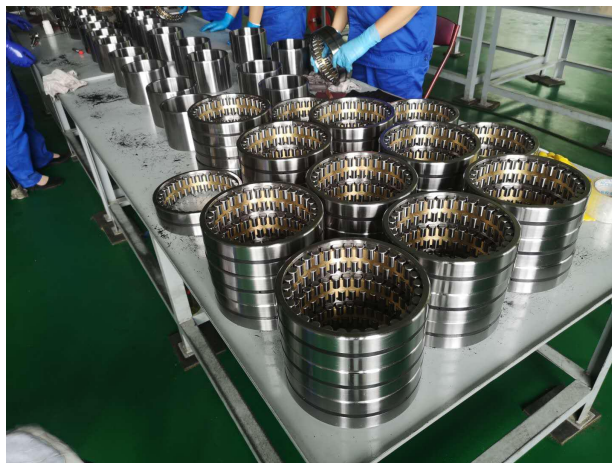
LUOYANG TEDIN BEARING CO., LTD.

Tel: 0086-136-63889399;

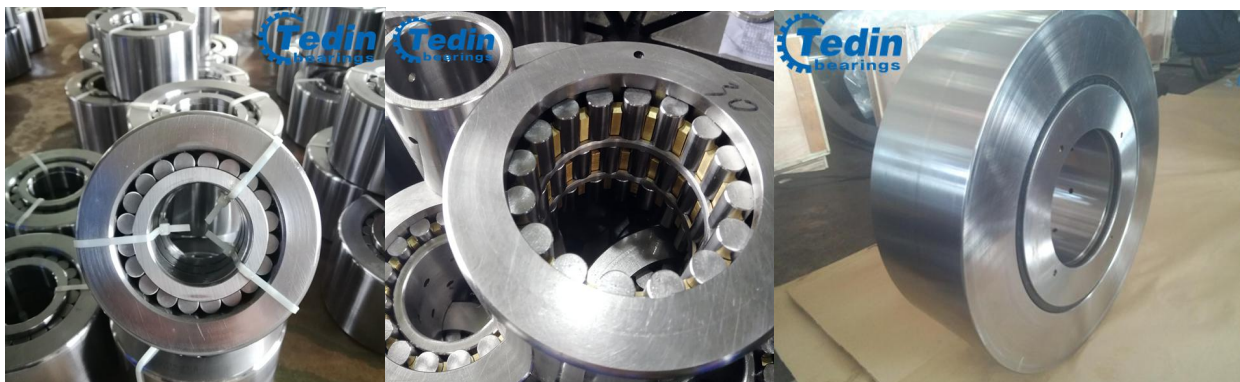
Email: sales@tedin-bearing.com;

Homepage: www.tedin-bearing.com;

Four row cylindrical roller bearing, standard types and customized types, widely used for rolling mills:



Multi-row cylindrical roller bearing, used for back-up rolls of rolling mills:



Welcome to contact us and visit our factory!

LUOYANG TEDIN BEARING CO., LTD.

Address: High-tech Zone, Luoyang, Henan, China