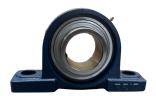


# U CONNECT



# New Product Launch: UCP/UCF (Inch and Metric Sizes)





We're thrilled to introduce our latest product, range of Pillow and Flange types of ball bearings, designed to give ultimate performance in industry as well as agriculture segments. This innovative solution aims to improve efficiency and gives better life expectancy for the users.

Dear Readers,

Welcome to the latest edition of the KEC Bearings newsletter! We're excited to share updates, innovations, and insights from the world of bearings and mechanical solutions. Thank you for being a part of our journey.

Best regards, Mehul Viradia Director - Operations KEC Bearings Pvt Ltd

## Team Spotlight

Meet our technical and sales team, who continuously working towards betterment of the industry and provide flexible as well as sustainable solutions to our valued customers which will help them to achieve optimum plant efficiency, better product quality and enhance bearing life.



Join us at Industrial Engineering XPO on 27-30 December 2024 at Raipur. We'll be showcasing our latest technologies and solutions. Don't miss the chance to connect with our team and explore new opportunities.



also providing We are training sessions to employees various on of aspects industrial products and latest trends as well as technology which will enrich their knowledge in the particular field and help them to solve complex problems of the industry ultimately increases efficiency of the industry.



### Industry Insights



## LATEST TRENDS IN BEARING TECHNOLOGY

Discover the latest trends and advancements in bearing technology. From advance lubrication technologies to selflubricating bearings, we explore how these developments are shaping the future of mechanical solutions. Currently we are working in developing spherical roller bearings with solid oil content. These bearings will not require re-lubrication during operation. It also saves lubrication time and increase productivity of the plant. Also decreases failure of the bearings due to lubrication and enhance bearing life.

### Community Engagement

## SUSTAINABILITY INITIATIVES

At KEC Bearings, we are committed to sustainability. our latest initiatives to reduce our environmental footprint and promote eco-friendly practices in our operations are we are trying to imply circular economy in our day-to-day operations to reduce use of plastics.

We return back packaging materials in which we are receiving our Raw- material to our suppliers so that they can re-use that material again to send us raw material. which will help them to reduce packaging cost and enable them to use minimum plastics and paper in their operations.



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## Case Study: Optimizing Rolling Mill Performance

Read about our recent project with Shree Krishna Rolling Mill Ltd., where we Optimized rolling mill performance with our high-performance spherical roller bearings. This case study highlights our commitment to delivering high-quality solutions tailored to our clients' needs.

Company: Shree Krishna Rolling Mill Ltd.

Industry: TMT bars Manufacturing

Location: Jaipur, India

Month: July, 2024

#### **Background**

Shree Krishna Rolling Mill Ltd., a prominent TMT Bars manufacturing company, operates a series of rolling mills used to produce high-quality steel products. The rolling mills are critical to the production process, and the performance of these mills directly impacts product quality and operational efficiency. However, Shree Krishna Rolling Mill Ltd. faced challenges with frequent bearing failures in their rolling mills, leading to increased downtime and maintenance costs.

#### Challenge

- 1. High Radial Loads: The rolling mills experience significant radial loads due to the high pressure and forces involved in the rolling process.
- 2. Heavy Shock Loads: The bearings in the rolling mills are subjected to heavy shock loads and vibrations during operation, causing premature wear.
- 3. Temperature Extremes: The operational environment involves high temperatures, which can affect bearing performance and lifespan.
- 4. Frequent Maintenance: Bearings were failing frequently, leading to excessive downtime and high maintenance costs.



#### Solution

- 1.Selection of Spherical Roller Bearings: Shree Krishna Rolling Mill Ltd., opted to replace the existing bearings with high-performance spherical roller bearings. These bearings were selected due to their ability to handle high radial loads, Heavy misalignment, High shock loads.
- 2.Enhanced Sealing and Lubrication: To complement the new bearings, Shree Krishna Rolling Mill Ltd., implemented advanced sealing and lubrication systems like Heavy duty seals and automatic lubrication system.
- 3.Temperature Management: Measures were taken to manage the high temperatures within the rolling mill environment, including cooling systems and Heat-resistant lubricants.

#### **Implementation**

- 1. Pilot Installation: The new spherical roller bearings and lubrication systems were first tested on a single rolling mill to evaluate their performance and reliability.
- 2. Performance Monitoring: Key metrics such as bearing temperature, vibration levels, and bearing life were closely monitored during the pilot phase.
- 3. Full Deployment: Following successful pilot testing, the spherical roller bearings and associated systems were deployed across all rolling mills.

#### **Results**

- 1.Improved Bearing Performance: Bearing failures decreased by 60% and the lifespan of the spherical roller bearings increased by 40% reducing frequent failures.
- 2.Increased Operational Efficiency: By Reducing downtime, overall production efficiency of the plant by 30% and maintenance cost reduced by 50% due to the enhanced reliability and reduced need for frequent repairs.
- 3.Enhanced Performance Under Extreme Conditions: Bearings performed under high temperature and effectively handle heavy shock loads and vibration, improving overall mill performance.



#### Conclusion

By transitioning to high-performance spherical roller bearings and implementing advanced sealing and lubrication systems, Shree Krishna Rolling Mill Ltd. was able to address the critical challenges faced in their rolling mills. The improvements in bearing performance led to enhanced reliability, increased production efficiency, and substantial cost savings. This case study highlights the importance of selecting appropriate bearing technologies and complementary systems to optimize performance in demanding industrial environments.



### **Technical Tips**

Maintenance Best Practices for Bearings
Proper maintenance is crucial for extending the lifespan
of bearings. Here are some essential tips for ensuring
your bearings operate smoothly and efficiently:

- Regular Inspections: Regular inspection of the operation parameters like Noise, Temperature, Vibration and Lubrication level is must to maintain bearing life.
- Proper Lubrication: Selection of the proper lubricants and implementation of required lubrication system is need of an hour for the industry to reduce breakdown and down time.
- Environmental Considerations: Contamination is enemy of the bearing. Proper sealing is needed to avoid contamination in the bearing operation chambers.

#### Contact Us

We'd love to hear from you! If you have any questions, feedback, or would like to learn more about our products and services, please contact us at

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