



CASE STUDY

Leading Customer in Steel Industry

Engineering Solution Extends Bearing Life, Reduces Production Loss

The customer faced continuous **failure of 6312 ball bearings** (competitor make) in their Turk Head application, which is responsible for turning hollow tubes into square tubes.

Bearings lasted only 12 hours. Each failure required ~2 hours to change the setup. Two setups failed daily, causing 4 hours of downtime per day. With a production rate of 40 tubes/hour, approximately **200 tubes were lost daily**.

Frequent downtime **impacted productivity and operational costs**.

The **NBC Industrial Application Engineering team** visited the site and conducted a thorough analysis.

Key actions included:

- Emphasized increasing bearing load capacity without compromising operational speed.
- Replaced the 6312 bearing with a NUP312ECM bearing, better suited for the application.

Customer Savings & Benefits

- Bearing life extended from **12 hours to 5 days** of continuous operation.
- Downtime significantly reduced, improving operational efficiency.
- Direct cost savings due to fewer setup changes and reduced production loss.
- Improved productivity, with higher tube output and lower maintenance requirements.
- Total Cost Saving of **INR 15,60,000.00** per Month