



CASE STUDY

Leading Customer in Steel Industry

Resolving Bearing Failures in Hot Rolling Mill Stand

The customer was facing **repeated bearing failures** in their Hot Rolling Mill stand. Key observations included:

The inner ring of the four-row cylindrical roller bearing was fracturing. Bearing life was less than one year, leading to frequent maintenance and downtime.

Bearing arrangement comprised **four-row cylindrical roller bearings** along with **tapered roller thrust and ball bearings**.

The **NBC Industrial Application Engineering team** visited the site to address the issue. Key findings from the investigation included:

- Excessively tight bearing fit caused high hoop stress, leading to inner ring fractures.
- Improper clamp fixation contributed to uneven load distribution.
- Seal orientation and bearing arrangement were not optimized for operational conditions.

Customer Savings & Benefits

- **Bearing life improved** significantly.
- Reduced bearing consumption, leading to fewer replacements.
- Significant **cost savings** for the customer.
- Enhanced operational reliability of the hot rolling mill stand.