

Industry: Forestry Pulp & Paper
End User: Not Disclosed
Application: Change to Sawmill Carrying Container (Wood)
Thordon Grade: ThorPlas-Blue
Date of Original Installation: January, 2006

Challenge:

The process of kiln drying involves extremely hot temperatures and high humidity and requires materials that can withstand these conditions. The customer was using bronze in the wheel bearings of their sawmill carrying containers, which are used to dry wood, and were unhappy with the wear life they were receiving. The bronze bearings were being exposed to temperatures up to 80°C (176°F) and pressures greater than 13.7 MPa (2000 psi), resulting in a very short wear life of only 2 months.



*Sawmill Carrying
Container Wheel Bearing*

Solution:

Due to the high temperature and humidity conditions, Thordon recommended ThorPlas-Blue bearings to replace bronze. ThorPlas-Blue bearings offer:

- Excellent performance in high impact load and high humidity conditions
- Long bearing wear life with no maintenance
- Low thermal expansion and water absorption
- Do not require oil or grease/greasing systems to ensure smooth operation



Results:

After careful consideration, the customer decided to use ThorPlas-Blue to replace bronze in the wheel bearings. The ThorPlas-Blue bearings provided a wear life of approximately 10 months, an increase in service life of 5 times that of bronze.