



# Durable Bearing Solutions for Road Reclamation Equipment

## CHALLENGE

The customer, a manufacturer of reclamation attachments, commonly known as asphalt grinders or cutters, needed a more reliable bearing solution for their high-powered milling machines. These attachments grind through asphalt and pulverize it into reusable material, replacing the traditional cut-and-haul method of road repair.

This demanding application exposes bearings to ground asphalt, gravel, tar and water, elements that cause severe contamination and wear.

The customer was using competitor bearings but faced repeated failures, including poor sealing and frequent housing breakage. Their goal was to find a tougher, longer-lasting solution that would reduce downtime, lower maintenance requirements, and deliver more consistent performance to their customers.

## TIMKEN SOLUTION

Working closely with their distributor, the customer was introduced to Timken® Solid-Block Mounted Spherical Roller Bearings with a rugged steel housing and standard M seal, protected by an extra polyurethane UFP plate.

Timken partnered closely with the customer’s engineering team to strengthen both the bearing and the overall system design. Working together, they determined that relocating the bearing to the outside of the machine would help reduce contamination, while making bearing locations external would simplify maintenance. This collaborative approach combined Timken’s expertise with the customer’s knowledge to deliver a more reliable, user-friendly solution.

As the customer’s design engineer explained:

*The nice thing about Timken is that whenever a problem or issue comes up, they are here quickly looking at the problem with us. In constantly improving our product, we have tried other designs and prototypes and will send our ideas to them, and they collaborate with us to come up with a custom design that will work for our product and our customers.*



## RESULTS THAT MATTER

The Timken bearing solution exceeded expectations. The steel housing delivered superior durability, and the seal with added UFP (urethane flange secondary seal) provided higher performance compared to competitor bearings, which typically required replacement every three to four weeks. The customer has experienced significantly lower failure rates.

Our high-performance spherical roller bearings feature an extended inner ring, hardened steel cages for tougher protection, and optimized internal profiles to minimize wear. This delivers higher capacity, longer life, cooler running, and reduced lubrication needs.