

Reducing bearing-related downtime and worker exposure in the fertilizer industry

The Problem

A UK fertilizer manufacturer uses a twin-screw mixer when preparing its ammonium nitrate for agricultural use.

A failed bearing involves downtime costs calculated at £1500 per hour. With solid spherical bearings, replacement was taking 4-5 hours, partly owing to equipment, such as gearbox couplings, that had to be removed and replaced.

Manufacture involves ammonia gas and high temperatures. Even after the process has been shut down, conditions for bearing fitters can be unpleasant with implications for health and safety regimes.

The Solution

Cooper Bearings assessed the situation and proposed the following solution which has now been in place for 9 months.

- Custom-built 'tandem' housing to hold two bearings.
- Two 02 CP 60mm EX/GR Cooper split roller bearings
- Specially extended HTP (high-temperature packing) seals

Benefits

- Split bearings can be changed without removing couplings etc.
- Bearing change time reduced to 1 hour
- Cost saving per change of up to £4500
- Fast change means less risk of exposure of fitters to hazardous conditions



Cooper: straightforward answers to tricky bearing problems

In addition to the world's most comprehensive range of off-the-peg split roller bearings, housings and seals, Cooper offers you the following, custom-made in our state-of-the-art factory:

- Roller bearings for shafts up to 1550mm
- Split taper roller bearings for shafts up to 780mm
- Housings, including hanger, pedestal, flange, take-up and rod-end units
- The choice of grey cast iron, stainless steel or other materials
- Sealing options to suit the material being handled: rubber, felt, heavy-duty lip seals etc.

For more information, contact us via our website www.cooperbearings.com