

## Biodegradable grease for bearings

The SKF 'green' grease, LGGB 2, is a general-purpose lubricant suitable for bearings.

Unlike other biodegradable and non-biodegradable greases, which often require a particular type of grease for each application, LGGB 2 is a highly competitive alternative to traditional greases, according to SKF.

"The SKF LGGB 2 meets the stringent demands of a range of engineering applications without any adverse effects on the environment," a spokesperson said.

"In particular, equipment users in the construction, earthmoving, forestry and farming industry are increasingly seeking 'green' solutions because environmental contamination may be an issue.

"Until recently, it was thought that current generations of biodegradable and low-toxicity lubricants could not satisfactorily meet the requirements of rolling bearing applications.

"SKF has managed to overcome the inherent disadvantages of biodegradable greases that have led to premature bearing failure."

LGGB 2 has been tested and approved for steel-on-steel spherical plain bearings, ball and roller bearings.

From studies, SKF has found that ester or vegetable fluids formulated carefully into lubricants

perform well in real applications.

"In particular, SKF researchers found that a combination of synthetic ester oil and a lithium/calcium thickener resulted in good properties as defined in terms of water and corrosion resistance without the need to use toxic additives.

"The LGGB 2 grease formulation, based on these constituents, performs well with ball, roller and plain bearings.

"This is a significant development, as conventional lubricating greases are normally considered suitable for only one bearing type.

"Each bearing class has a different contact surface, which can affect lubricant performance.

"For instance, the lubricant film in ball bearings has a point contact; in roller bearings line contact; plain bearings full contact over the area."

SKF selected four different formulations that were subjected to stringent bearing tests.

From these tests, it was found that LGGB 2 offered superior performance over a range of operating conditions and bearing types and established a steady operating temperature set at 90 degrees centigrade.



## Bauxite miner takes three WA900 loaders

WA-based alumina producer Alcoa - already a major user of Komatsu mining equipment - has taken delivery of three WA900-3 wheel loaders for the loading bauxite ore at its two mines.

Two of the loaders are working at Alcoa's Huntly mine, and the other is working at its Willowdale mine.

Both mines are about 100 kilometres south of Perth.

The loaders at both mines work in conjunction with 160 and 230tonne excavators loading blasted or ripped material from the face into Komatsu HD785 (Willowdale) and HD985 (Huntly) dump trucks.

Ripping at both mines is carried out with Alcoa's two D575A-2 dozers.

In addition to the three WA900-3 loaders and the two D575A-2 dozers, Alcoa's fleet at the two mines includes 10 HD785-3 dump trucks, 19 HD985-3 and HD985-5 dump trucks, two PC1600 excavators, and a D475A-3 dozer.

According to Huntly production manager Ian Cardilini the two loaders work as backup machines to the excavators - either to increase production or when the excavators are not available - along with carrying out clean up work and surge loading in the stockpile areas.

Both are fitted with 13 cubic metre spade buckets. They replaced a Komatsu WA800-3 loader that had notched up more than 50,000 hours, and a loader of another make.

"Our operators certainly prefer these new loaders," said Cardilini.

"They've found the stick control very easy to learn, and it's a lot easier on them over a shift.

"In terms of production, they are certainly outperforming the machines they replaced.

"We've also found them so far to have good reliability, with availability the same as or even better than the WA800."

**It's all about performance and reliability**

**HITACHI**  
Excavators and Dump Trucks

**HITACHI CONSTRUCTION MACHINERY (AUSTRALIA) PTY LTD**  
Auckland (03) 9350 1066 Albany (03) 9325 5155 Brisbane (07) 3274 4000 Darwin (08) 9041 2146 Goldcoast (08) 9421 2649 Lismoreton (03) 6528 2435 Mackay (07) 4922 6000 Melbourne (03) 9791 6006 Newcastle (02) 6542 1077 Perth (08) 9451 0700 Sydney (02) 9788 6000 Townsville (07) 4727 6100

www.hitachi.com.au

## Conveyors get the brush-off

Kinder & Co has released a new version of its K-Brush conveyor belt cleaner - Type LM - with a 'sealed for life' and maintenance-free shaft mounted gear reducer.

This allows its use in sensitive environments handling food and plants, in laboratories, as well as mainstream bulk handling installations.

Designed to be installed alongside both rubber and PVC belt cleaning applications, it has shown to perform exceptionally in applications where belts are cleated, chevron or reversible and/or joined with mechanical fasteners, Kinder & Co said.

K-Brush LM Type is also supplied with a choice of brush configurations which are selected for the specific applications.

The company said a potentially explosive application would require an anti-static brush fill.

So far, installations range across industries as diverse as salt, sugar, fertiliser, wood dust, cement dust and carbon black, particularly because operators in such environments expect good performance and a unit that is simple to adjust regularly.

K-Brush Type LM is a standardised unit that sweeps the belt clean using a rotary action.

Wet, dry, sticky, hygroscopically charged and abrasive products are effectively handled.

The unit is essentially a system of non-corroding polyethylene brushes giving the product a long lifespan and the ability to work safely in food grade environments.

Bristles are an abrasive resistant polypropylene, with a wide variety of bristles being available.

A rotary powered brush cleans all types of surfaces.

**PowerTek Australia Pty Ltd**  
ELECTRICAL ENGINEERING, SWITCHBOARD DESIGN & MANUFACTURE  
PO Box 118, Shearwater, Tasmania 7307 Australia  
East Devonport, Tasmania (03) 6427 0154  
www.powertek-oz.com.au info@powertek-oz.com.au

- Motor Control Centres
- Main Switchboards
- High Voltage Motor Control
- Irrigation Control Equipment
- VSD & Soft Starters
- Mining & Heavy Industry Specialist

AMT 5014

**REDUCE WASTE through incineration**  
WITHOUT POLLUTING THE ENVIRONMENT

by using the  
**NSI TURBO-BURN**

CLEAN, FAST and ECONOMICAL way to dispose of oil soaked absorbents, office waste, packing materials and non-infectious waste.

**FREE CD NOW AVAILABLE!**

- Does not require a licence or licensed premises to operate.
- Is 99% smoke, ash and pollution free.
- Only one person required to load and operate the unit.
- Comes with a manufacturer's warranty.

The incinerator's unique design eliminates smoke and traps fly ash. There is no residue, no half-burned material and no smouldering cake. 100% of the oil-soaked waste is reduced to 3% ash. The Turbo-Burn burns so clean that from 3 metres away you can't tell it is working. Safe, efficient and convenient, just roll it back into storage when not in use.

**1 TURBO-BURN \$4,500 + GST**  
Optional - safety fence \$420 + GST, safety strobe light \$280 + GST  
All units now fitted with an earth leakage circuit breaker.

For more information, contact  
**PPS Perth Petroleum Services**  
OIL & CHEMICAL SPILL EQUIPMENT

AMT 1415  
Ph: 08 9258 5877 Fax: 08 9258 5833