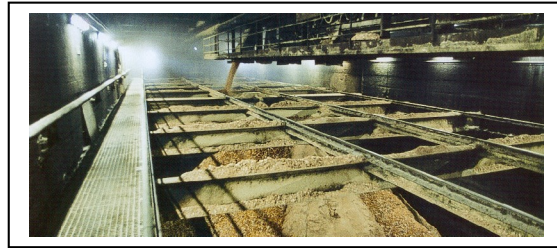


APPLICATIONS FOR “ONWO” LUBRICANTS IN THE PAPER AND BOARD INDUSTRY

The lubricant recommendations listed below provide details of the most cost-effective products.

PULP PRODUCTION

Tree trunks are trimmed to a length of one to two metres, and then go through a bark-peeling machine. The peeled trunks are then split into 2.5cm by 8mm pieces, which remains in a pile for 8 to 10 weeks so that the microorganisms can decompose the resin.



De-barking creates a moist, dusty environment where shock loading on the bearings is enormous. ONWO Vibrosafe Grease is ideal for all bearings subjected to these conditions. Plain bearings should be pretreated with Assembly Grease prior to assembly. Open gears should be lubricated with ONWO Adhesive Open Gear Grease 2.5

The wood chips are boiled with concentrated acid under pressure to dissolve out undesired substances. The acid is then washed out of the fibrous pulp that remains and the pulp bleached with compounds such as chlorine dioxide and sodium hypochlorite.

Bearings, which are subjected to the wet working conditions, are lubricated with ONWO Watersafe 2. This grease has special water-repellent qualities and will prevent bearing failures because of grease emulsification and water penetration of bearings. This quality also gives longer periods between re-greasing.

WET END OF DRYER

Bearings in this section where ONWO Watersafe 2 is recommended are:

- wire guided roll bearings
- table roll bearings
- couch roll bearings
- press roll bearings
- breast roll bearings

Also ONWO Vibrosafe Grease, which performs excellently in extremely dusty conditions, is recommended for bearings subjected to contamination from pulp dust.



Water is removed from the paper by means of pressure and heat. After the paper is filtered, the still wet paper is flattened with presses and then goes to the dryer section.

DRYING CYLINDERS AND SPAR DRUMS

At some 60km/hour, the paper runs over steam heated drying cylinders and on to the sizing press.



CYLINDER BEARINGS

The anti-friction bearings are assembled with a light smear of ONWO Synthetic High Temperature Grease 2 and the grease cavity is filled by no more than a one third. Re-lubrication is carried out sparingly once a month.

OPEN GEARS DRIVING DRYING CYLINDERS

ONWO Adhesive Open Gear Grease 2.5 is used to increase the periods between lubrication and eliminate throw-off of grease. Application frequency can be reduced to a quarter of that of conventional bitumen based open gear compounds.

EXTRACTOR FANS

These fans operate under difficult conditions of heat and moisture. ONWO Semi-Synthetic High Temperature Grease 2 can extend lubricating intervals and reduce maintenance costs.

CALENDARS

Using lubricant sparingly can reduce contamination of paper, and specialist lubricants enable much less quantity of grease to be employed.

Grease lubricated bearings should be serviced with ONWO Ultraload EP2M

SUPER CALENDARS

The bottom roll bearings are very heavily loaded and severe wear is often experienced. After periods of rest, high starting torques are required to overcome 'stiction'. Specialist lubricants provide positive lubrication at start up with lower loads on motors and couplings, and also inhibit wear.

When Plain bearings are assembled they should be given a film of ONWO Assembly Grease to minimise pick-up during running in, and subsequent lubrication should be carried out with ONWO Ultraload EP2M.

SCORING AND SLITTING MACHINES AND REELERS

The main problem on these machines arises from paper and board dust being ground into a paste with oil or grease. The employment of a molybdenised lubricant reduces the frequency of lubrication so that the quantity of lubricant to attract dust can also be reduced. Wear, cleaning and maintenance can be kept to a minimum. As a good guide, lubricate at one third to normal frequency.

Slitter roller bearings use ONWO Ultraload EP2M

Open gears use ONWO Adhesive Open Gear Grease 2.5

To facilitate easy movement of slitter and scorer rings on roller surfaces use ONWO Assembly Paste as a dry lubricant.

