Lofrix® Original

Lofrix® Original has proven to be effective in reducing temperature, friction, wear and energy consumption in industrial gearboxes, bearings and machine tooling, resulting in extended machine life and reduced maintenance.

Lofrix® Original is an oil dispersed additive, being carried by the host oil to coat metal surfaces with a barrier which is capable of withstanding extreme pressure and even temporary absence of lubricant. Lofrix® Original can be applied directly into gearboxes or used in automatic lubricating systems.

Lofrix® Original is especially effective in conditions of extreme wear, extended operating periods and high temperatures.

When added to automatic lubrication systems, Lofrix® Original lifts carbon deposits enabling them to be filtered from the system. Lubrication systems are then able to operate at lower pressures, reducing the amount of energy required to operate effectively and lowering oil temperatures.

Benefits

- Improves productivity
- Increases plant life
- Lowers energy consumption
- Lowers operating temperature
- Reduces vibration
- Reduces noise levels
- Reduces corrosion
- Reduces maintenance costs

Features

- Effective in all oils
- Simplifies lubricant stocks
- Bonds to most metals
- Cleans and lubricates
- Waterproof
- Low hazard in use
- Non flammable
- Contains no solid particles

Applications

- Gearboxes
- Compressors
- Bearings
- Chains

Industries using Lofrix® Original

- Power stations
- Cement and brick manufacturing
- Paper and board manufacturing
- Machine tooling
- Printing
- Textile manufacturing

Application

Using Lofrix® Original is a simple process. The recommended amount, which is between 1% and 2% of the bulk oil amount, is combined with a sample of the base oil. Heating to around 55°C will speed up the blending process. A clouding of the mix will develop and then clear with stirring. Once clear this mix is added to the bulk oil.

With gearboxes, Lofrix® Original can be added directly into the box while it is working. Mixing will occur automatically.

Case Study

Gearboxes

Cemex, the largest producer of ready-mix concrete in the world, has conducted a series of tests on industrial processing plant gearboxes. The objective of the tests was to monitor the potential reduction in energy consumption with the use of Lofrix®.

Before conducting tests with Lofrix®, parameters were established with an average of on-load and off-load readings being taken over one week. Measurements were then taken after the addition of Lofrix® and an average established over the following week. The results are shown in the following tables.

Barrel Drive Gearbox

Make: David Brown Type: M10202Z Rating: 22kw 1440rpm Ratio: 21.57:1 Oil Capacity: 10 litres

	Off-Load (Amps)	On-Load (Amps)
Gearbox Normal	24.5	27.4
Gearbox with Lofrix®	22.5	25.0
Energy Consumption Reduction	8.1%	8.7%

Mixer Gearbox

Make: David Brown Radicon Type: Underdriven worm wheel Rating: 45kw 1440rpm Oil Capacity: 20 litres

	Off-Load (Amps)	On-Load (Amps)
Gearbox Normal	29	58
Gearbox with Lofrix®	26	55
Energy Consumption Reduction	10.3%	5.1%

Static gearboxes for a rotating drum situated within a mixing tower

No.1 motor is the lead motor and on-load readings were taken for both gearboxes.

	Motor 1 On-Load (Amps)	Motor 2 On-Load (Amps)
Gearbox Normal	100	97
Gearbox with Lofrix®	78	73
Energy Consumption Reduction	22%	24.7%