

## Techni-Tips

### Selecting Hydraulic Oils

Proper selection of hydraulic oils has become much more important in last few years

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### Roller Chain Lubrication

The dependability of roller chain operation depends on basic principles of good installation, proper lubrication & maintenance

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### Centralised Automatic Lubrication Systems

They might be expensive, but they are quite cheap when compared to the extra dollars in labour to apply a dollar's worth of lubricant

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### Use of Analysis in monitoring engine condition

Oil analysis helps operators to get the most value from their machinery & lubricants

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### 10 Maintenance Steps for long diesel life

Engine owners & manufacturing research departments found positive ways of extending engine life - summarised in 10 maintenance steps

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### Guarding your equipment investment

Management Checklist to ensure a good preventative maintenance programme

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### Other uses for Turbine Oils

Turbine oils now have many uses as high quality lubricants including hydraulic & compressor oils

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### Compressor Manifold

Simple rules to follow to eliminate the hazard of fires / explosions due to dirty compressor system conditions

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Basics of Lubrication

The reduction of friction is the basic reason for lubrication. Viscosity & temperature are other key aspects to be considered.

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Plain Bearings

Plain bearings are shafts riding in journals - each has its own advantages & disadvantages

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Preparation of Gearbox Reservoirs

To gain optimum performance from LE&rsquo;s ALMASOL & MONOLEC gear oils it is necessary to properly prepare the enclosed gear reservoir

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Refrigeration Systems

The role of compressors in compressor refrigeration cycle

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Notes on Oil Consumption

The amount of oil consumed varies from engine to engine, make & operator

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Plastic Industry

Use of plastic is rapidly increasing. The 2 key classes of plastic materials are Thermoplastic & Thermosetting

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Current API-SAE Engine Oil Service

Automotive & engine manufacturers include these designations in their owner/operator manuals

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## Bearing Failures

Recognise the causes & what to do about them

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## Reduce Cost & Increase Reliability

The importance of the use of high performance lubricants in reducing lubrication costs & increasing reliability

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## Air Tools

Air or pneumatic tools are high speed mechanisms that provide portability & replacement of manual labour - lubrication is crucial

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## Grease Bases used in the manufacture of lubricants

A lubricating grease is defined as a solid or semi-liquid product representing a dispersion of a thickener in a liquid lubricant

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## Simple Maintenance, Turbocharger life

Simple cleaning is about the only required turbocharger maintenance

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## Universal Type Wet Brake

What is a universal tractor fluid? It needs to perform 3 major functions...

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## Hydraulic Oil Filtration

75% of hydraulic system failures are caused by contaminated fluid

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## Lubrication Programme

The best defence against equipment failure & high maintenance costs is to have a sound lubrication programme

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### Dielectric, Transformer, Insulating Oils

In oil terminology these terms are synonymous & are used as a description for an oil to be used in electrical apparatus

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### Anti-friction bearing maintenance & lube

Proper lubrication of anti-friction bearings is essential to their successful performance

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### Motor Oil Degradation

Motor oil has to work in an uncontrolled chemical factory - the engine. It is subject to temperature & pressure changes & contamination

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### Hydraulic Equipment

Hydraulics offer unlimited flexibility in power transmission

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### Food Industry Equipment

The Food Industry provides a very challenging operating environment for lubricants

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### Piston Ring & Cylinder Wear failures

New tighter ring designs for lower particulate emission requirements make ring/cylinder failures even more critical

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### Hydrostatic Transmissions

They use oil to transmit power from the power source to the driven mechanism

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### All LE Brand Products are exclusive to LE Inc

Every product sold by LE is manufactured to its own strict, exclusive requirements. Many include LE's exclusive additives

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### Torque Converters

They ensure that all drive line power is transmitted via fluid. Its purpose is to extend the versatility of a vehicle & continuous performance

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### Gear Oils

Many changes have taken place recently in gear oil requirements & specifications

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### Screening of Influent Streams

These are necessary to remove solid materials from the influent & this difficult application requires high performance lubricants

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### Soot Blowers & other boiler cleaning equipment

Retractable or rotary versions are common applications at oil, coal or multi-fuel power plants

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### Coal Processing

Proper lubrication of coal processing equipment is an important factor in obtaining good performance & long engine life

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### Aluminium Complex Grease

It is a valuable multi-functional, multi-purpose product

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### Engines supplying power at WWTP

Large internal combustion engines are found at many wastewater treatment plants - proper lubrication is vital

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### Lubrication of blowers at WWTP

They are numerous in any large WWTP. Rotary units use light oils, reciprocating piston units use heavier oils

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## Pumps at WWTP

Pumps maybe rotary, piston or turbine type & are usually grease lubricated except for turbine types

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## Gear reducers at WWTP

Vital for increasing/decreasing speed & torque in power transmission flow

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## Clarifiers in the WWTP Process

They are the heart of the WWTP system, removing turbidity, sediment & material

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## How bearings fail

Wear & spalling is inevitable, but its occurrence is usually premature & result of human rather than metal failure

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## Grease Troubleshooting

Applications, Symptoms, Possible causes & checks to be carried out

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## Seals

Categories of seals & the various materials to be used

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## LE 1250 ALMASOL® High Temperature Lubricant

Effective lubrication at high temperatures requires a high quality LE grease.

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## Grinding / Pulverizing Mills

Many industrial minerals need to be pulverized in mills. The lubrication of these mill's large open gears is critical to the plant's operation

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### Engine Oil Filtration

Filtration systems were introduced as improvements to engine oil lubrication systems

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### Compressor Changeover

Potential problems may be encountered when converting air compressors to LE's compressor / industrial oils

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### PYROSHIELD

Huge open gears used in industrial mills require specialist lubricants in order to work effectively & efficiently

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### Fuel Additives

Why should you use a fuel additive & what are the advantages?

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### Gear & Gear Lubricants

Gears are required to carry increasing load capacities & LE has addressed this need by developing better gear oils to safely carry these increased loads

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### Multilec Industrial Oils

Four years of lab & field evaluation has resulted in this unique, multi-functional product

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### Oil Pressure Changes

Users of diesel engines often note a change in oil pressure when they change from monograde to multigrade

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### Lubrication of Electric Motors

When servicing electric motor bearings, it is important that the right grease is applied in the right quantity

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### Rock Drill Oil Applications

Rock drills require a compressed air source of suitable pressure & capacity with an oiler to introduce lubricant into the air system

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### Lubricant Base Stocks

Base stocks used to formulate lubricants are normally of mineral (petroleum) or synthetic origin

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### Why the need for Worm Gear Lubes

Worm gearing is used to transmit motion & power between non-intersecting shafts - often where space is limited

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