

# **IM** *International* **mining**

Informed and in-depth editorial on the world mining industry

## **ARICOM'S AMUR IRON AND TITANIUM**

New mines and continuing  
exploration

## **SOFTWARE AND MINE PLANNING**

Major consolidation in  
software suppliers

## **AFRICAN PROJECT RENAISSANCE**

The continent is finally  
being recognised

## **LOGISTICS FOR FAR FLUNG SITES**

Supplying, powering,  
equipping mines anywhere



*Is your Mine using 'Enhanced Lubricants™' to improve the Reliability of your Gearboxes?*

*Do your current gear oils use 'Next Generation' additive technology?  
Are they providing adequate wear protection for your heavily loaded gears?*

*If the answer is 'No'....*

*Lubrication Engineers' latest gear oil can help your Mining business to increase its profits*

## L.E. Inc launches DUOLEC™ Vari-Purpose Gear Lubricants 1601 – 1609 DUOLEC™ Gear Lubricants supersede famous ALMASOL® VPGL

Lubrication Engineers, Inc. (L.E.) is proud to launch their latest 'Enhanced Lubricant™' to the Mining Industry – a new, improved product that will supersede L.E.'s now legendary ALMASOL® Vari-Purpose Gear Lubricants:

### 1601-1609 DUOLEC™ Vari-Purpose Gear Lubricants (DVPGL)

This new EP gear lubricant range offers L.E.'s customers significant performance improvements & includes L.E.'s new unique proprietary additive **DUOLEC™** that was developed specifically for use in gear oil applications. It is a 'dual acting' liquid additive that shares attributes of both L.E.'s ALMASOL® & MONOLEC® anti-wear additives but offering even better wear protection. **DUOLEC™** incorporates revolutionary new technology which is thermally activated to provide 'dual' levels of anti-wear & extreme pressure protection that form a solid-like protective layer on the metal surface.

The **1600 DUOLEC™ Series** (ISO 46 to 1000) boasts other benefits including:

- ◆ **Incredible FZG Test 14th Stage Pass** resulting in outstanding market leading gear wear protection.
- ◆ **Timken OK Load of 75lbs** for better extreme pressure performance in heavily loaded Mining gear applications.
- ◆ **'Next Generation Additive Package'** - The new 'Enhanced' package provides superior performance & meets the industrial gear claims of US Steel 224 & AGMA 9005 E02 as well as the API GL-5 specification for severe automotive conditions – a performance level that few other industrial gear oils are able to claim. Typical industrial gear oils

used in Mines are not formulated to meet this high level of performance.

- ◆ **Greater thermal stability** as the range is formulated with more thermally stable & oxidation resistant extreme pressure (EP) additives that do not sacrifice any load-carrying capability. Its oxidation resistance provides improved thermal stability at elevated temperatures & therefore longer oil life & drain intervals.
- ◆ **Improved shear resistance** due to a new 3-component tackifier system that provides improved gear climbing & adhesion to metal surfaces whilst minimizing the amount of shear experienced by the product when in service or even when filtered to low micron levels.
- ◆ **Better water separation** – meaning easier draining of water from gearboxes for longer oil life & reduction in rust problems.
- ◆ **Filtration ability to low micron levels** without harming or removing additives.
- ◆ **Compatibility with ALMASOL® Vari-Purpose Gear Lubricants** - The **1600 DUOLEC™ Series** has been thoroughly tested & is completely compatible with the ALMASOL® Vari-Purpose Gear Lubricant line that it is replacing – meaning that L.E.'s current gear oil customers have no concerns about converting their gearboxes from ALMASOL® to DUOLEC™ Vari-Purpose Gear Lubricants.



*"The replacement product range for our extremely popular & successful ALMASOL® Vari-Purpose line was always going to have to be incredibly impressive – we have done even better than planned with our new DUOLEC™ Vari-Purpose line. The performance of these new gear oils is just outstanding and gearbox operators in Mines worldwide will very quickly understand that DUOLEC™ will improve the reliability & performance of their expensive equipment – their production & profits will increase",* said Scott Schwindaman, President, Lubrication Engineers Inc.

Leaders in Lubricants 

## THE 'LUBRICATION RELIABILITY SOURCE™'

For how DUOLEC 1600 Series  
can help lubricate your mine's  
profits visit:  
[www.le-international.com](http://www.le-international.com)  
[www.le-inc.com](http://www.le-inc.com)