



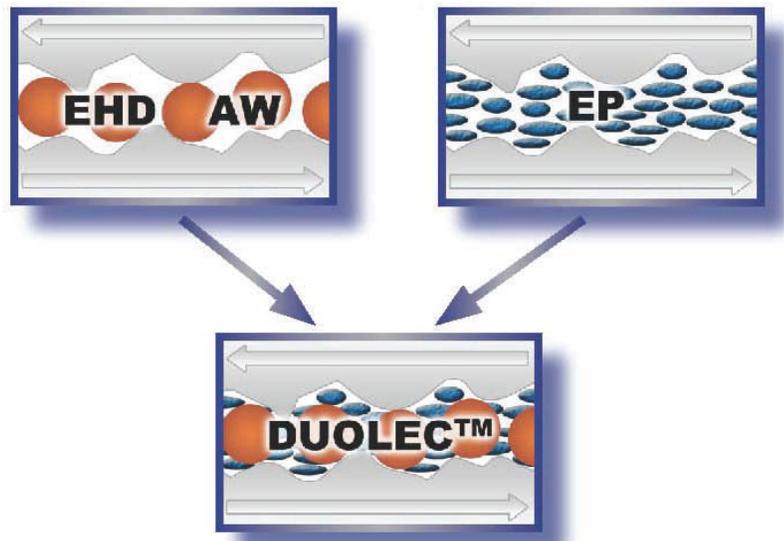
## LUBRICATION ENGINEERS<sup>®</sup>, INC. LAUNCHES DUOLEC<sup>™</sup>

EXCLUSIVE 'DUAL ACTION' ANTI-WEAR & EXTREME PRESSURE ADDITIVE

FORT WORTH, Texas, USA (July, 2007) – Fifty years after the introduction of its famous, unique & proprietary anti-wear additive ALMASOL<sup>®</sup>, Lubrication Engineers (LE) is launching their latest additive for the enhancement of their LE gear oils.. LE is proud to announce the launch of their next generation proprietary additive **DUOLEC<sup>™</sup>** - offering even more superior protection than ALMASOL<sup>®</sup>. **DUOLEC<sup>™</sup>** has a 'dual action' that also shares the attributes of both LE's ALMASOL<sup>®</sup> & MONOLEC<sup>®</sup> anti-wear additives. It is a temperature activated, dual acting, liquid additive that imparts special properties & synergies to the LE lubricants in which it is used. **DUOLEC<sup>™</sup>** increases lubricant film strength & protects metal surfaces by outperforming at greater temperatures & loads. In a wear test according to ASTM protocol, **DUOLEC<sup>™</sup>** was found to reduce wear by as much as 11% when it was the only additive incorporated into base oil – proving its outstanding performance without the interference of other ingredients.

### **How DUOLEC<sup>™</sup> Works**

- ▶ **DUOLEC<sup>™</sup>** incorporates revolutionary new technology which is thermally activated to provide a 'dual' layer of anti-wear & extreme pressure protection that forms a solid-like protective layer on the metal surface. This layer then fills surface asperities, effectively smoothing the surface & minimizing the effects of any metal to metal contact thereby reducing friction & preventing welding & surface wear. Testing for the friction reduction capabilities of **DUOLEC<sup>™</sup>** was conducted using the SRV friction test machine. The test results showed a 25% reduction in friction over the base oil when **DUOLEC<sup>™</sup>** was incorporated.



- ▶ **DUOLEC<sup>™</sup>** also greatly enhances the film strength of the oil to prevent rupture of the oil film & thereby minimize asperity contact.

**LUBRICATION  
ENGINEERS<sup>®</sup>, Inc.**

*Leaders in Lubricants*



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- ▶ The technology in **DUOLEC™** is designed to be thermally activated in stages. When the loads are increasing the Elasto-Hydro-Dynamic & mixed film anti-wear components of **DUOLEC™** kick in. After loads become even greater, then the boundary lubrication extreme pressure performance of **DUOLEC™** is activated.

Like **MONOLEC®**, it is a liquid anti-wear additive for the Elasto-Hydro-Dynamic (EHD) regime & is soluble in base fluids. Like **ALMASOL®**, it works in the boundary regime of extreme pressure surface protection at temperatures normally encountered by gear lubricants.

**Value of DUOLEC™ to LE Lubricants**

- ▶ **DUOLEC™** acts synergistically to improve performance qualities of other components in the lubricants
- ▶ **DUOLEC™** reduces wear by reducing friction, improving oil film strength & providing surface protection when extreme pressures cause metal

to metal contact.

- ▶ **DUOLEC™** is a liquid additive which does not build up or fall out of solution.
- ▶ **DUOLEC™** is designed specially for use in gear lubricants under the conditions & loads typical to gear service

*“LE is very excited about **DUOLEC™** - the performance of this new & unique additive is quite exceptional – even in comparison to our current proprietary additives. We know that our loyal customers worldwide will also be similarly impressed by the benefits that it provides for their expensive gearboxes. It really is a “new dimension” in lubricant additive technology and we are confident about the major positive impact it will have on the gear lubricant market”, said Scott Schwindaman, President, Lubrication Engineers, Inc.*