LuBoron™
Advanced Lubrication Technology

The LuBoron™ Story

Most of the time when something sounds to good too be true, it is. Then again every so often a new idea, process or product comes along that truly changes the existing paradigm. I would like to introduce such a product to you and your company.

Several years ago a new and astounding discovery was made at The Department of Energy's Argonne National Laboratory affiliated with the University of Chicago. Argonne discovered that a small quantity of boric acid introduced onto opposing metal surfaces reduced frictional forces up to an astonishing 80% and reduced frictional wear up to 90%. (The highest levels of friction reduction are achieved with finer grained, well-machined parts).

The chemistry is more involved, but in short the process occurs because the boric acid reacts with the metal surfaces in the presence of water vapor and oxygen forming boric oxide. The bottom layer of boric oxide attaches itself via ionic, covalent and hydrogen bonds to virtually any metal surface and creates multiple platelet layers of boric acid on top. The boric oxide surface also prevents oxidation. These bonds are so strong that pre-existing dirt, rust and carbon varnishes are displaced. The boric acid layer on top of the boric oxide is composed of CLS (crystal lattice structures) platelets that slide over each other almost effortlessly, - much like a deck of playing cards. These nearly indestructible bonds literally change the metal surface's characteristics and create a self-healing friction barrier. This friction barrier is near permanent for the life of the metal treated and has hardness equal to 85% of a diamond. **Although applied via the lubrication system LuBoron™ products are as much a metal treatment as a lubricant enhancer.**

Several more years and several millions of dollars were spent developing various formulations and processes necessary to keep these sub-micron sized boric acid particles suspended in various oils, greases and lubrication systems. LuBoron's proprietary PAO, polyalphaolyfin based formulations and linking agents are of the highest quality. Our products are totally compatiable with all other lybricants, either mineral or synthetic based. New advancements have lead to additional product and process patents being filed to further protect the technology. The end process is now referred to under a registered trademark; "Boron CLS Bond®." This name refers to the "crystal lattice structure" (CLS) bonding referenced above. As a result LuBoron, LLC now proudly offers these patented products under the "**LuBoron™**" label. Applications include: internal combustion engines, gear cases, automatic transmissions, hydraulic systems, bearings, pumps, mold release compounds, steel cable manufacturing and many others. LuBoron™ is an **active** (not passive) lubricant.

LuBoron™ also has a group of products specially formulated for the **marine** industry. These products have all the superior characteristics of the base products, but are specifically designed to prevail in an adverse environment, displacing and deterring rust, corrosion, and chemical buildup.

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In addition to the dramatic friction characteristics, the environmental benefits achieved are outstanding. There are **no negative** environmental or health aspects with these products and in addition a totally biodegradable and fire resistant hydraulic fluid will soon be available.

The **key** ingredient, "Boron CLS Bond®" is what makes the **LuBoron™** products unique. A significant amount of time and money have been spent with world-class laboratories documenting all product claims. Argonne National Labs, Herguth Laboratories and BNM Research have done extensive testing in accordance with ASTM specifications. Major manufacturers especially in Europe and Japan, such as, Volvo, Daimler-Benz and Toyota have proven in laboratory and field tests the merits of this technology. For additional information and test results, please visit our website: www.luboron.com

This extensive research and testing has shown that engine efficiencies improve approximately 2 to 7% (dynamometer and road tested) along with significant increases in fuel efficiencies (2 to 5%). Rebuild cycles are reduced dramatically (at least two fold) and internally generated friction heat is significantly lowered (40 to 50%). Warranty issues not withstanding, lubrication/filtration change cycles can be extended due to the enormous diminution of wear metals, slower acid build-up and reduced oxidation of the base oils. LuBoron will NOT harm metal components or systems in any way when used as directed. LuBoron™ products and customers are covered by $10 million of product liability insurance. In addition the latest tests indicate that boric acid is an ideal replacement for sulfur in diesel fuels. The boric acid provides an excellent lubricant additive for the fuel and significantly reduces cylinder wall/compression ring wear while solving sulfur related emissions issues completely. Incorporating boric acid in diesel fuel also functions as an excellent bio-stat thus preventing bacterial growth.

LuBoron™ products are **NOT** ground Teflon® (PTFE) based oil additives. In 1996 Consumer Reports tested motor oils and engine treatments and stated, "We found no discernable benefits from any of these (Teflon-based) products". **LuBoron™ is a revolutionary product**. The claims outlined here are totally valid and will stand-up under the most rigorous scrutiny. Unlike PTFE products, LuBoron's benefits are not instantaneous, but require reasonable time for the chemical processes to occur. Depending primarily on temperature, the time line may be 2-4 hours for internal combustion engines to a few weeks in the case of some grease applications.

Upon completion of the chemical processes, the metal is totally protected with an extremely resilient corrosion barrier with phenomenal friction and wear reducing qualities. **LuBoron™ guarantees these products and customer satisfaction unconditionally.**

These product/processes will eventually be a part of all basic equipment manufacturing and/or after market applications. Obviously earlier adaptors will receive the maximum benefit. The representatives of LuBoron™ would be happy to offer a more formal presentation to key members of your company, as well as discuss the wide range of potential business relationships and opportunities. Please contact us for a complete presentation packet and personal contact information. Thank you.

Cordially,
LuBoron, LLC

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