



World Class
World Wide

2009 PROBLEMS • SOLUTIONS

www.bdlworldwide.com

1ST QUARTER

BEARINGS

MECHANICAL POWER TRANSMISSION

ELECTRICAL POWER TRANSMISSION

MATERIAL HANDLING PRODUCTS

SEALING DEVICES

FLUID POWER

FILTRATION

LINEAR MOTION CONTROL

RETAINING/LOCKING DEVICES

ADHESIVES, SEALANTS, LUBRICANTS

INDUSTRIAL PRODUCTS/SUPPLIES

SPECIALTY SERVICES





2009 PROBLEMS & SOLUTIONS

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1ST QUARTER

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Contact your local BDI branch for more information on how we can solve your challenging problems.

PROBLEM



The Application:

Municipal Solid Waste and
Recycling Industry

The Problem:

High shock loads and constant
operation can result in premature
failure and costly downtime.

SOLUTION

Altra products are built for reliability and extreme conditions

Built for durability and developed for extreme conditions, the industry leading brands of Altra Industrial Motion provide the very best in quality, reliability, and the power to perform.

Our solutions include:

- **Formsprag Clutch**[®] Overrunning and Overload Clutches
- **Boston Gear**[®] Centric Clutches
- **Warner Linear**[®] Linear Actuators
- **Boston Gear**[®] Speed Reducers
- **TB Wood's**[®] Sheaves and Couplings

Designed to eliminate premature failure and minimize downtime, the brand solutions of Altra Industrial Motion withstand various elements such as water and chemicals, high shock loads, constant operation, as well as UV radiation exposure—elements making waste of an operation's time and money. Altra solutions combat such elements by providing true experience with true power.



 **Altra**[®]
Industrial Motion

Food Grade Synthetic Gear Oils save time, energy, and maintenance costs



Problem: A manufacturer was using an ester-containing extreme-pressure (EP) synthetic gear oil in custom-built gearboxes on their machines. The EP gear oil did not meet USDA/FDA standards. For four years, the manufacturer had been unable to find a food-grade gear oil that could withstand the high operating temperatures of the gearbox, which ranged from 71-82°C (160-180°F).

Solution: Using **Molykote® L-1115FG Gear Oil – ISO 150** reduced friction of internal components lowered the operating temperature of the gearbox by 11°C (20°F). At this temperature, the Molykote® gear oil which is USDA/FDA approved, lasted three times longer than the previous gear oil. The plant went from monthly oil changes to a 90-day maintenance schedule. This reduced labor and increased machine up-time, especially since oil changes required 50% disassembly of the gearbox.





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- **Actuators/Jacks**
- **Calibration**
- **Clutches/Couplings**
- **Gearbox Repair**
- **Mixers/Centrifuges**
- **Roller and Pulley Covering**
- **Spindle/Live Center**
- **Bearing Repair**
- **Hydraulic/Pneumatic**
- **Crushers/Shaker Screens**
- **Ball Screws/Linear**
- **Electrical**

Repair Services



Made in U.S.A.



chain design drives dependability, reliability & productivity

Two of the toughest Drives 81X USA chain series products are 81X KD and 81XH KD chains. Manufactured in Fulton, IL, these chains are built to the highest standards in the industry. Drives USA 81X KD and 81XH KD chains are made from special alloy steel and are specifically designed with increased clearances to minimize risk of stiff joints in elevated temperature applications.

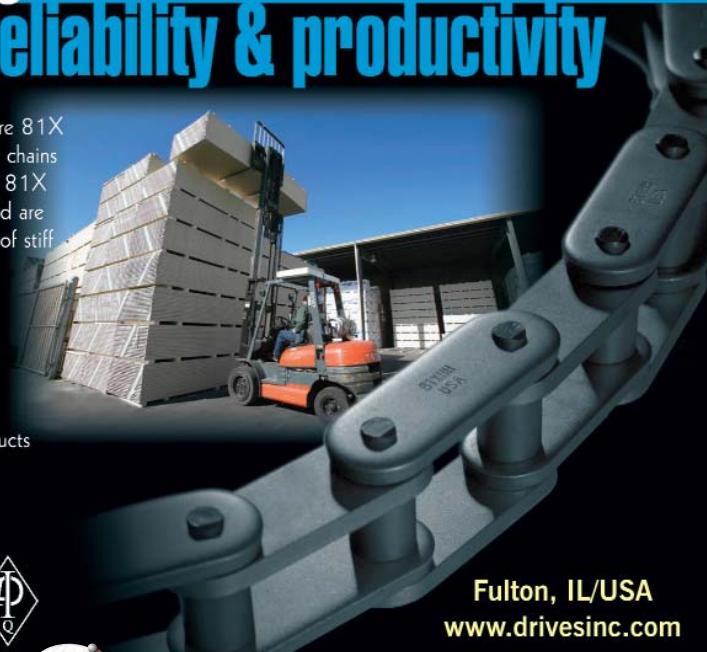
FEATURES

Special Strand Lengths • No-stain Lubricants
Quad-staked Heavy Series

CUSTOM SERVICES

Extended Life CHP® Series • Corrosion Resistant Chain Products

Drives delivers leading edge solutions with over 100 years of advanced engineering knowledge and experience.



LICENSED UNDER
SPEC 7F-0022

Fulton, IL/USA
www.drivesinc.com

PROBLEM:

Lubrication maintenance in hard to access applications.

SOLUTION:

Eliminate Lubrication maintenance by using ISOSTATIC OILUBE® self-lubricating powdered metal bearings. Impregnated with oil, ISOSTATIC OILUBE® bearings provide long life and superior wear resistance without the need for lubrication maintenance.

ISOSTATIC OILUBE®



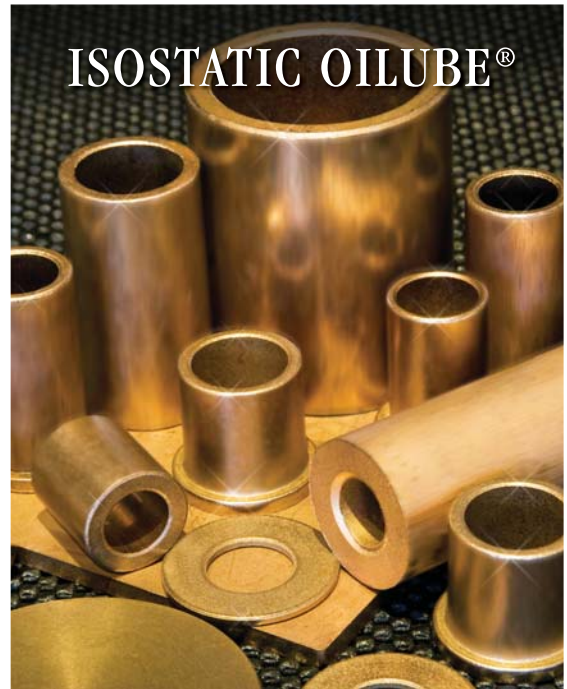
ISOSTATIC OILUBE® self-lubricating powdered metal bearings combine proven performance and cost effectiveness to give you *solutions* for your bearing applications.

Contact your local BDI branch for further information.



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ISOSTATIC OILUBE®

Isostatic Industries, Inc.

ISOSTATIC

800-621-5500
www.isostatic.com



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Introducing..... www.bdiworldwide.com

BDI's new worldwide website demonstrates our commitment to providing customers with the excellent local service they are familiar with, worldwide.

Click on the globe to see the detailed listing of countries where BDI is providing local service, inventory and application expertise.

*Please visit www.bdiworldwide.com
to learn how BDI can help you
locally...worldwide!*



PROBLEM: Seized and corroded assemblies of threaded and cylindrical parts that cost time and resources to disassemble.

LOCTITE®

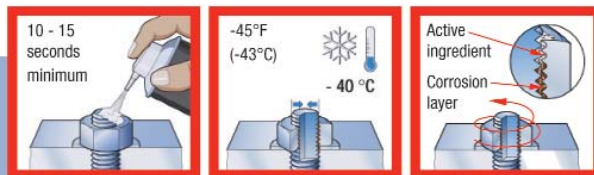
Traditional fixes include drilling and tapping or cutting off the bolt. Both are complicated and frustrating methods that require time, special equipment and training, as well as personal protection equipment. In addition, cutting is not always the correct option, as some applications are not conducive for torch usage. Penetrating oil is another method used, which can be cheap and easy, but also unreliable, time consuming, and messy.

SOLUTION: Loctite® Freeze & Release

- Instantly freezes seized and rusted parts (bolts, nuts, studs) down to -45°F (-43°C)
- Exceptional shock-freeze effect causes microscopic cracks in the layer of rust, allowing the lubricating ingredient to wick directly into the rust
- Assembly can be easily dismantled after allowing only 1-2 minutes penetration time
- Released parts remain lubricated and protected from corrosion



PREVENT FUTURE CORROSION AND SEIZED PARTS WITH LOCTITE® ANAEROBIC SEALANTS: For about one-third the cost of mechanical fasteners, superior performing Loctite® threadlockers and thread sealants cure to a hard thermoset plastic that lock threads together, prevent unwanted movement or loosening, seal against leakage, and protect from rust and corrosion. Can your mechanical fastener do all that?



Problem Solved!

Henkel

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CFC FREE

PROBLEM

End-users require a no residue, fast evaporating contact cleaner that contains no chlorinated or brominated solvents. Flammability is not an issue; however, employees have complained of odor problems with the current product. The product must be registered food grade.

NEED

A plastic safe, low odor, effective cleaner that is fast evaporating and meets NSF[®] (National Sanitation Foundation) K2 requirements.

SOLUTION

CFC Free Electro Contact Cleaner. It is fast evaporating, leaves no residue and does not have an odor. CFC Free Electro Contact Cleaner has been approved by NSF[®] (K2 rating) for use in food processing plants.



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TAKE THE MYSTERY OUT OF MOUNTING YOUR BEARINGS

Rexnord Industries is proud to announce the latest innovation in bearing technology – The Rexnord® SHURLOK® 6000 Series Adapter Mount Roller Bearing.



The breakthrough bearing is easier to install and four times faster to mount and unmount versus traditional SAF split bearings. The bearing comes out of the box, ready to go onto the shaft – no assembly required. The sleeve design allows the use of less expensive commercial grade shafting. When the SHURLOK has been properly installed, the innovative Spyglass® window provides an indication. No guesswork required by the installer.

The SHURLOK roller bearing can be removed as easily as it goes on. A quick release feature allows the sleeve to be mechanically separated from the shaft during removal. Rexnord is so confident in the SHURLOK Bearing, it comes with a two year warranty – twice the industry standard.





PROBLEM

A Need For Improved Machine Efficiency And Operational Reliability

SOLUTION

X-life E1 Spherical Roller Bearing

X-life represents the premium quality standard of INA and FAG products offering extended life and increased performance of up to 70% longer service life. Our self-aligning spherical roller bearings also handle shaft deflections and misalignments for reliable solutions in gearboxes, construction machinery, conveyors, and vibrating screens.

X-life – a truly powerful partner to help you meet your aggregate bearing needs.



FAG

SCHAEFFLER GROUP
INDUSTRIAL

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TSUBAKI SHARP TOP CHAIN

A Cut Above

- **Longer wear life**
- **Increased productivity**
- **Lower operating costs**

Sharp Top Chain from U.S. Tsubaki is designed to last longer in your operation:

- Patented lube groove bushing on sizes 80 and larger minimizes pin/bushing wear to extend chain life.
- Heat-treated side plates guard against wear-fatigue cracking to run longer in high-speed applications.
- We apply a special lubricant to further extend wear life — unlike other manufacturers, who only use rust-preventing oil.
- All Tsubaki Sharp Top Chains have straight sidebars for additional strength.



U.S. Tsubaki manufactures the chains we sell. That means we have complete control of the manufacturing process and can ensure quality is built in. You save with less downtime and fewer replacements.





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BDI Belting Specialists

BDI Belt Specialists can provide specialty belts for customers in the Food, Automotive, Package Handling, Printing, Aggregate and Power Generation industries, to name a few.

BDI's inventory includes rubber, thermoplastic, modular, antimicrobial, wire belting, and many more. Our Belt Specialists can help with belt recommendations, plant surveys, conveyor design, training, and technical assistance, which in many cases result in cost savings.

www.bdiworldwide.com

BDI is a leading supplier and service provider to manufacturing companies throughout the world. Our commitments to customer service and technical expertise have been our trademark for success and global expansion.

With over 130 branches located in 12 countries and representing over 1,000 quality manufacturers, BDI continues to build customer loyalty throughout the supply chain. Our primary industries include:

| | | | | |
|-------------|-----------------|-------------------|------------------|-----------------|
| Aggregate | Chemical | Material Handling | Paper/Pulp | Printing |
| Agriculture | Food & Beverage | Metals | Plastics | Rubber |
| Automotive | General Machine | Packaging | Power Generation | Water Treatment |

SPECIALTY SERVICES

MAINTENANCE & REPAIR

BALL SCREW REPAIR
BEARING MODIFICATION
BEARING REPAIR
CONDITION MONITORING
CONVEYOR BELT INSTALLATION AND FABRICATION
ELECTRICAL CIRCUIT BOARD REPAIR
ELECTRICAL SYSTEM INTEGRATION
GEAR BOX REPAIR
GEAR, SPROCKET & SHAFT FABRICATION
INDEXER REPAIR
SPINDLE/LIVE CENTER REPAIR
TROLLEY & TROLLEY CHAIN REBUILDING

OPERATIONS

24 HOUR SERVICE
CONVEYOR BELT SERVICE
CORPORATE ACCOUNT SERVICES
COST SAVINGS DOCUMENTATION
DATABASE CREATION
DELIVERY
E-COMMERCE
INVENTORY MANAGEMENT
OEM CONVERSION PROGRAM
ORDER AUTOMATION - EDI
PLANT / STORE ROOM / EQUIPMENT SURVEYS
STANDARDIZATION PROGRAMS
STOREROOM MANAGEMENT / INTEGRATED SUPPLY
TRAINING PROGRAMS





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