

News and Information on Innovative Sealing Technologies

LEADER *of the pack*

**JOHNSON
PACKINGS**
& INDUSTRIAL PRODUCTS INC.

PRODUCT SPOTLIGHT

MACHINED PLASTICS CUT DOWN LEAD TIME & DEVELOPMENT COSTS

Parker Radyne Seals

Have your current seals been wearing out before they should? Is excessive friction slowing down your system? Replace your current seals with Radyne PTFE-based seals. Parker's Redmond Plastics Division (formerly JM Clipper) manufactures the Radyne seals and offers a material list containing the lowest wearing, most lubricious compounds available.

Extremely short lead times allow your original specifications to go from prototype to final product in just days. Because Radyne seals are machined, not molded, most tooling charges and delays typically associated with the mold-making process are eliminated.

Radyne Seals are:

- Compatible with almost any chemical
- Not prone to breakaway and running friction
- Self-lubricating and dry running
- Manufactured in diameters up to 38"
- Kind to soft dynamic surfaces
- Long-lasting



Why use Plastic?

Plastics are increasingly replacing traditional materials such as bronze, stainless steel, cast iron, and ceramics. They are chosen for both improved performance and cost reduction.

Plastics can reduce weight, eliminate corrosion, improve wear performance in unlubricated conditions, reduce noise, increase part life, and insulate and isolate both thermally and electrically.

Materials available in tube, sheet, rod, and special shapes:

- Delrin
- Lexan
- Mylar
- Nylon
- Peek
- Glass-filled Teflon
- Phenolic
- Teflon
- Ultem
- Ertalyte
- UHMW

Johnson Packings can machine a wide variety of parts including:

- Lantern rings
- Ball seats
- Wear plates
- Cups
- Thrust bearings
- Nylon parts
- Wear strips
- Thordon Bearings



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GARLOCK GARNERS EPA CLEAN AIR AWARD

Garlock Sealing Technologies has received the U.S. Environmental Protection Agency's 2008 Clean Air Excellence Award for using a more environmentally friendly solvent in the production of its industrial gasketing.

"From the over 120 applications received, Garlock's project was chosen by the EPA's Office of Air and Radiation for its impact, innovation, and replicability," said EPA administrator, Pat Childers, in announcing the award.

"Garlock is to be congratulated for its dedication to improving our nation's air quality." Established in 2000 at the recommendation of the EPA Clean Air Advisory Committee, the award annually recognizes outstanding efforts toward achieving cleaner air. Winners must directly or indirectly reduce pollutant emissions, demonstrate innovation, offer sustainable outcomes, and provide a model for others to

follow.

"It is indeed an honor to be recognized nationally for our environmental efforts," said Garlock President Paul Baldetti. "I should note that this and similar initiatives have been voluntarily undertaken across all EnPro Industries companies to provide a healthier, safer workplace, and to improve our environmental stewardship." Most recently, the company has also developed a solution for sealing valve stems -- the single largest source of fugitive emissions of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) - - that limits these emissions to well below allowable levels.

The three-year, \$3 million solvent-replacement project involved the elimination of an EPA-regulated VOC/HAP from the manufacture of Garlock's sheet gasket products. Used to seal pipe flanges in a wide range of

process industries such as chemicals, oil refining, pulp and paper, and power generation, these products are manufactured by compressing mixtures of fibers and solvated rubber.

Garlock not only eliminated the regulated emissions from production of these gaskets, but also installed a high-efficiency recovery system that captures 95% of the solvent for reuse. Conversion to the new solvent also provided significant economic benefits, as well as a better end-product. In addition to improving process yields, it resulted in gaskets that seal 20% more effectively, an important advantage for the industries that use them to reduce fugitive emissions from their own piping systems.

SOURCE: Garlock Sealing Technologies
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Thank you!

Thanks to Garlock for spending some time with us at our office recently and bringing along our 2008 Top-10 Distributor Award!



From L-R: Doug Somerville (VP of Sales, Garlock), Brice Craven (President, Johnson Packings), Mike Monica (Regional Sales Mgr, Garlock), and Bruce Goodin (Territory Mgr, Garlock)

GARLOCK STYLE 212-ULE



Garlock Sealing Technologies has developed a new ultra-low emission, high-temperature valve stem spool packing designed to simplify leak detection and repair (LDAR) in the hydrocarbon and chemical processing industries. The Style 212-ULE packing outperforms engineered sets, easily meeting global emission standards. Tested worldwide by a major hydrocarbon processor, the packing delivered emissions performance of <20 ppm average leakage. It also was successfully fire-tested to API 589.



Going Green

GETTING THEIR BEARINGS:

CRUISE SHIPS, MARINE INDUSTRY STRIKE A GREEN COURSE

Thordon Bearings manufactures what is becoming the "gold standard" for ship bearings. They are lubricated with sea water rather than grease or oil -- a new technique that's becoming increasingly important as countries start getting tough about the amount of waste oil that gets dumped into the oceans.

"Companies are looking for ways to operate their ships that are environmentally friendly and that's a major catalyst for us," explained Craig Carter, marketing director.

"If they don't meet the new standards they face civil penalties, jail times, loss of contracts and bad public relations. Companies have to eliminate that risk, and it's a big risk."

The problem facing the world's shipping industry is basic -- the shafts that drive ship propellers are supported by bearings and as the shaft turns it has to be lubricated. When that's done with grease or oil as much as six liters a day can leak out into the oceans.

Multiply that by roughly 48,000 ships -- cruise liners, containers ships, tankers, bulk carriers -- times 300 working days a year means more than 86 million liters of pollution get dropped into oceans, lakes and rivers every year. That's the equivalent of two Exxon Valdez spills every year.

"Losing that amount of oil was just considered normal operating

losses, but now you have to account for every liter of oil on the ship," Carter said.

Thordon's contribution is a new design of bearing.

Constructed of an elastomeric polymer -- a compound that combines the qualities of plastic and rubber -- it can be lubricated with sea water, which is simply pumped in and out as needed.

Thordon's innovation is the new material for the bearing and a bronze casing for the metal shaft.

The Burlington-made equipment has been installed on about 600 ships to date, giving the local firm about 1 per cent of the world market.

"The marine industry is very conservative about trying new prod-

ucts," he said.

"They're slowly starting to realize this is serious stuff and that the old ways of doing things have to be rethought."

Founded in 1911 in Hamilton by the great-great-grandfather of current owner George (Sandy) Thomson, Thordon is part of the Thomson-Gordon Group.

While marine bearings are the largest part of the company's business, other parts make bearings for hydro generation and industrial uses.

Source: The Hamilton Spectator
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TEKLEEN REDESIGNS WEBSITE

TEKLEEN® water filters are the industry's highest quality automatic, self-cleaning water filters and strainers. They can also help you conserve water in numerous different ways, and now it's even easier to find out how... Check out their redesigned, extremely user-friendly website at www.tekleen.com.

The screenshot shows the Tekleen website interface. At the top, there's a navigation bar with tabs for 'Products', 'Filter Applications', 'Filtration 101', 'Support', 'About Us', and 'Contact Us'. Below this, the main content area features a large heading 'Self-Cleaning, Automatic Water Filters' with a sub-heading 'for industrial and irrigation water filtration'. To the right of this heading is a 'Need Support?' section with a 'Start Here' button. Below the heading is an image of several Tekleen water filters of different sizes. At the bottom of the screenshot, there are two columns of text describing the benefits of the filters, such as saving time and money on cleaning and repairs, and conserving water.