

# MEETING ENVIRONMENTAL STANDARDS

Triangle Fluid Controls Ltd., manufacturers of the Durlon® brand of gasketing solutions, based in Belleville, Ontario, Canada, serves customers throughout the world with innovative fluid sealing solutions and pump protection products. Committed to manufacturing quality gaskets and isolation products that maximize usage and application coverage, Triangle Fluid has gained a global reputation for providing maximum sealability to meet end user's fugitive emissions requirements throughout a variety of sectors, including oil & gas, mining, pulp & paper and chemical.

Fugitive Emissions Journal had the pleasure of speaking with Mike Shorts, President of Triangle Fluid Controls, about the company's commitment to high performance sealing products, their application-based approach to customer service and training, as well as their proactive stance on product development, from a quality and standards perspective - helping customers reach and exceed environmental mandates.

By Melanie Gogan, Editor



Triangle Fluid Controls - Belleville, Ontario, Canada

Triangle Fluid Controls Ltd. was established in December of 2007 through a corporate spin-off from gasket manufacturer, Durabla Canada. The Durabla brand, established globally in 1912 and in Canada in 1922, initially gained popularity for its offering of premium-grade asbestos fiber sheet material, eventually migrating to non-asbestos products in the 1980s. While the manufacture of asbestos products was completely phased out in the early 2010s, Durabla Canada remains a distinguished manufacturer of compressed non-asbestos gasketing and some molded fluoroelastomer products for the North American and Asian markets.

Since its establishment, Triangle Fluid has assumed the responsibilities for Durlon® Sealing Products' technical, sales and service support, in addition to the manufacturing of PTFE (polytetrafluoroethylene) and semi-metallic fluid sealing products on a global scale. The company is an active participant in many industry associations and stays actively in-tune with international regulatory standards and recommendations. According to Mike Shorts, "Since we service virtually every process industry in the world, we have a considerable amount of information to routinely keep up-to-date on."

## Company commitment to maximized performance

Triangle Fluid operates a little differently than many major competitors in this market space. Shorts explains, "We have developed our product styles in a way to maximize usage and minimize selection options." The company's philosophy is to offer fewer products than its competitors while still offering the same application coverage; which in turn provides customers with reduced costs and fewer chances of selecting the wrong material for the wrong application. Accord-

ing to Shorts, this represents a huge safety advantage for end users. For Triangle Fluid, the products within each category, namely *compressed non-asbestos sheets and gaskets; PTFE sheets and gaskets; semi-metallic gaskets; metallic gaskets; and electrical isolation products* all stand their ground and are all considered part of the company's "major" products. When it comes to the emerging focus on global fugitive emissions reduction efforts, Shorts asserts that the Durlon® Sealing Solutions brand is ideally suited to satisfy end user requirements.

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President of Triangle Fluid Controls

## The Durlon® sealing advantage

Shorts points to two specific product categories that have been tested and proven to offer exceptional sealability in challenging conditions. The company's filled-PTFE products – most notably their most versatile product, Durlon® 9000 glass-filled PTFE, offer exceptionally tight sealing characteristics. Secondly, Triangle Fluid's premium-grade corrugated metal insert gasket, Durlon® Durtec® with DurCore™ technology, is ideally suited to fluctuating pressure and temperature conditions while being fire-safe

and offering unparalleled sealability. When it comes to the hazardous and challenging conditions present in the oil & gas, chemical and mining industries, to name a few, these product specifications ensure safety, reliability and the assurance of a significant reduction in overall fugitive emissions.

In addition to the manufacturing and supply of the Durlon® brand of gasketing solutions, Triangle Fluid also represents DFT Inc.'s silent axial-flow check valves in Canada. An affiliate company to Triangle Fluid, located in Exton, Pennsylvania, USA, DFT Inc. has been dedicated to making premium quality silent check valves for over 70 years. "DFT's objective is to solve check valve problems and prevent check valve failures," says Shorts. He further notes that, as opposed to simply meeting line size, the company specializes in providing in-line check valves that meet customers' specific requirements. In some cases, minor modifications to DFT valves have solved customer problems by improving performance and extending service life, he adds. To this end, the Check Valve Doctor™ continues to satisfy customer needs through its ability to solve unique and challenging customer problems. According to Shorts, DFT silent check valves are known around the world as the valve to use to prevent or eliminate water hammer problems.

## High quality standards

At Triangle Fluid, quality is governed by the company's active ISO 9001 Quality Assurance program. All manufactured products are batch tested for compliance to internal and published technical data. In addition, all fabricated gaskets are individually measured

for dimensional accuracy prior to shipping.

While the company manufactures many of its products in-house, several products and components must be externally sourced in order to meet the price targets required by the company's global customers. As Shorts explains, Triangle Fluid goes through a very extensive vendor qualification process, which includes detailed product specifications, batch testing requirements and bi-annual quality audits. "Every vendor is treated like an extension of the Durlon® brand," he says, "and as such we have very high standards for our vendors to meet." Once received at their Belleville plant, all sourced products are inspected and submitted for final product approval.

## Global presence

Triangle Fluid offers its Durlon® fluid sealing products across the globe, with a select distribution network and locations in 17 countries. "End users of our products expect our customized services and support wherever they may have an operating location, and we have strategically established distribution in key countries and locations where our end-user base needs it the most," Shorts explains. This commitment to servicing customers on a global scale is highlighted by the company's network of subsidiary and affiliate companies. Triangle Fluid Controls has a subsidiary company in Singapore (Durabla Asia Pte. Ltd.), that acts as a sales office to the Southeast Asia market, as well as a subsidiary in China (Durabla Fluid Controls (Suzhou) Ltd.), that assumes the role of sales, warehouse and light fabrication operations for the mainland China market. An affiliate company



# WITH DURLON® FLUID SEALING SOLUTIONS



Triangle Fluid lab testing



Triangle Fluid gasket training rig

to Triangle Fluid, called Gasket Resources Inc., headquartered in Downingtown, Pennsylvania, is the master sales, marketing and manufacturer of Durlon® Sealing Products in the United States. Technical Services for Gasket Resources is located in Houston, Texas, which provides technical support to end users and plant personnel. Along with their established US distribution network, they have serviced their clients with Durlon® gasket products since 2002.

## Customized approach

With the growing market of fluid sealing distribution, fabricators and M&A's, Shorts urges some caution. Most notably with respect to large industrial supply stores and fabrication warehouses that tend to represent the majority of the major fluid sealing brands, in addition to their own private brands. He explains, "It is important for end users to determine who has their best interests at heart, and who is truly invested in their particular needs in meeting fugitive emissions regula-

tions. "The mandate at Triangle Fluid is to treat every technical inquiry like a custom inquiry, which also includes educating customers on the company's products, industry standards, customized installation practices and general fluid sealing technical knowledge. In effect, it is this customized approach that helps guarantee successful end-use application and results.

Shorts explains, "We are very much experts in what we do and not just suppliers of the products we have." In reference to his trained technical staff and full-service fabrication shop, dedicated to the Durlon® brand, he adds, "The complexity of sealing bolted flanged connections is not easily understood and our expert *Applications Engineers* work diligently with each customer to find the solution that works best for them."

## Mobile training initiative

The company offers a mobile gasket training program that travels to customer sites to provide various levels of hands-on gasket installation training. *The Durlon® Gasket Installation Certification* combines classroom training with hands-on learning, using the company's state-of-the-art gasket training rig, capable of simulating experiences in real-world scenarios. It allows customers the unique opportunity to not only see exactly what is happening inside the flange in real-time, but understand the importance of proper techniques and the advantage of putting best practices to use. Once training is complete, participants receive a certificate of completion that can be leveraged towards further training for engineering credits or as required training hours, if applicable.

## Meeting environmental standards

With the goal of providing fluid sealing solutions that make sense, both financially and strategically, Shorts stresses the company's commitment to a safe and sustainable planet, and its role in the reduction of fugitive emissions within the applications where Triangle Fluid and Durlon® products are used. As a manufacturer of fluid sealing products designed to seal tighter than current regulations require, Shorts explains that Triangle Fluid is ideally qualified to resolve troublesome and costly leaks once detected through a leak detection and repair (LDAR) program.

Closely monitoring regulatory requirements for methane emissions reductions in the USA, Canada and around the world, Triangle Fluid is prepared with several products that are ready to meet pending regulations. "We have products with certification status to NSF61, TA-Luft (VDI Guideline 2440), USP Class VI and API 607. We also have several products that conform to various FDA regulations," he explains.

This proactive stance with regards to up-and-coming regulatory changes is nothing new for Triangle Fluid. In addressing the company's commitment to meeting not only current regulatory emissions goals, but future ones as well, Shorts says, "Triangle Fluid was ready for the implementation of the Clean Air Act before it was introduced, which helped customers be compliant without significant additional fluid sealing material costs. Similarly, we are prepared to offer the same ease-of-transition to help our customers meet their compliance requirements in the future."

## An eye to the future

Research & Development (R&D) is at the cornerstone of the company's approach to product performance. According to Shorts, Triangle Fluid is always looking to improve upon existing products, in addition to searching for the next greatest fluid sealing solution.

*"When we work with our customers we have a vested interest in their success and their reduction of leaks and fugitive emissions."*

Mike Shorts,  
President of Triangle Fluid Controls

The company currently has an R&D project underway. It is testing various processing techniques when applied to different grades of PTFE resins, in order to take advantage of unique properties that each may have. Some initial success in this project, explains Shorts, has resulted in a need to expand the company's facilities in order to bring in additional production equipment with greater load capabilities to process such material. To this end, the company is currently expanding its operations by over 60 percent to add future production and warehousing capacity. The new facilities will be fully operational and ready to service global customers by the end of the year.

With plant expansion and product growth on the horizon, and a dedicated staff on hand, Triangle Fluid Controls is ideally positioned to continue helping customers achieve their fugitive emissions targets in the most cost-effective manner possible, says Shorts. When combined with the company's *Durlon® Gasket Installation Certification* program and highly experienced technical support services, Shorts asserts that tight static seals can be achieved with relative ease.

In closing, he adds: "Fugitive emissions regulations, though daunting in scope, can be solved with existing technologies, provided improved and accurate installation practices are followed. While installing gaskets the right way may take more time, in the long run it is safer not only for personnel, but also the environment." To this, the *Fugitive Emissions Journal* provides an A+ rating!

## Triangle Fluid Controls at a glance

**Company name:**  
Triangle Fluid Controls Ltd.

**Years in business:** 9 years

**Global headquarters:** 399 College Street E., Belleville, ON, Canada, K8N 5S7

**Brands supported:** Durlon®, Durlon Sealing Solutions®, DurCore™, Durtec®, DFT®

**Products:** Compressed non-asbestos sheets and gaskets; PTFE sheets and gaskets; semi-metallic gaskets; metallic gaskets; and electrical isolation products

**Industries:** Aerospace, agri-food, chemical processing, mining, oil & gas, pharmaceutical, power generation, pulp & paper, refining, petrochemical & biochemical, ship building, steel, automotive, heavy duty diesel engines, small engines and appliances

**Website:** [www.trianglefluid.com](http://www.trianglefluid.com)