



# Thermal News *Autumn 2012*

*closing the loop on thermal solutions*

ISO 9001 REGISTERED COMPANY  
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## *Welcome to Durex Industries' Autumn 2012 Thermal News.*

The 3-months since our summer newsletter have been exciting. Durex completed a Joint Venture with Oasis Materials, launched an Online Thermal Solution Store, and introduced a new 1/8" Cartridge Heater. We thank you for the opportunity to share these developments with our customers and friends.

### ***Flexible Heaters a Winner at Indy!***

Sometimes heater applications are just a lot of fun as demonstrated during the 2012 IndyCar Championship Season. A Durex silicone rubber flexible heater helped Indy racer Ryan Hunter-Reay in his Andretti Motorsports car win the season championship. The Durex heater pictured was used to heat the car's gearbox. Thanks to Ken Austin at Garcor who worked with the Andretti team. Additionally, Durex' heaters were on the Andretti Motorsports cars that finished 2nd, 3rd and 4th in the Indianapolis 500 qualifying trials. Durex is proud to have been a small part of Andretti Motorsports success.

***Congratulations to Ryan Hunter-Reay & team Andretti!*** ■

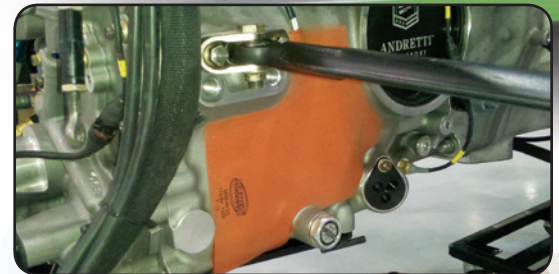
### ***Durex Industries and Oasis Materials Joint Venture***

In August 2012, Durex Industries and Oasis Materials (Poway, CA) established a Joint Venture (JV) Company. The JV will continue development and marketing of Oasis' Aluminum Nitride (AlN) based multi-layer ceramic heater technology. Under the agreement, Durex will provide technical, sales, and marketing support. Oasis will continue to provide technology leadership and development.

In many applications, AlN heater technology provides superior performance when compared to traditional metal heater technologies. This allows equipment and instrumentation designers to improve the performance of their products. Key AlN attributes include high watt density for rapid temperature ramp rates, high electrical insulation resistance, and high temperature rating. In addition, AlN is inert to most common chemicals ■

### ***New! 1/8th inch Cartridge Heater***

In October 2012, Durex Industries announced release of the new 1/8 inch (3.175 mm) cartridge heater. The 1/8 inch cartridge heater was developed for Analytical Instrumentation OEMs that required a small thermal solution for gas chromatograph, mass spectrometer and other applications. Durex' heater can be custom designed for applications requiring 304 stainless or Inconel® sheaths in lengths up to 12 inches, and up to 745 watts at 240 VAC. Common applications include heating stainless steel semiconductor gas delivery and vacuum exhaust lines, gas canisters, precursors, valves and other components. ■



*Durex Silicone Rubber Heater on Andretti Motorsports Gearbox*



*AlN Ceramic Heater in 3D Configurations*



*New 1/8th Inch Cartridge Heater*

***"Durex Industries' goal is to be the BEST overall thermal solution supplier in the industry."***

***heaters • sensors • controls • process systems***

**Durex Online Store 2 Day Delivery on Process Heaters**

Durex Industries is proud to announce that our NEW Online Thermal Solutions Store is **READY to take orders**. In August 2012, Durex' Online Store went live. Our first customer purchased screw plug immersion heaters, because they needed the quick 2 day turnaround and online ordering was convenient. Durex' Online Store includes over 7,000 heaters, sensors and temperature controllers with most products deliverable in 2 working days.

Product categories available today include:

- Heaters: Flange Immersion, Screw Plug Immersion, Cartridge, Cast DFX Circulation, Quartz and Ceramic
- Sensors: Mineral Insulated Thermocouple, Resistance Temperature Detectors, General Purpose Thermocouples, and Thermocouples for Plastics Industry
- Temperature Controls and Transmitters: Standard Temperature Controls, Temperature Control Consoles, and Temperature Transmitters

Durex' Thermal Solution Online Store is unique because most of our products are factory direct (Made in Cary, IL, USA) with highly competitive lead times and pricing. Additionally, customers benefit from the technical and application knowledge that is co-located at our Cary, IL, facilities.

Customers can easily link to the Online Store. Simply, go to the Durex' homepage [www.durexindustries.com](http://www.durexindustries.com) and click on **Online Store** or go directly to the BUY DUREX link: [buy.durexindustries.com](http://buy.durexindustries.com) . ■

**High Temperature DFX Bronze Circulation Heaters**

The ability to apply engineering expertise to challenging thermal applications is a reason that customers come to Durex. This was the case recently when a bio-fuel company had a requirement for a high temperature circulation heater. During regeneration cycles they operate the heaters up to 550°C (1022°F). Durex' standard DFX circulation heater uses aluminum, which is a great thermal conductor but would melt in this application.

Durex' engineers chose to use bronze instead of aluminum, because bronze could withstand the high process temperature. Durex also has the capability to cast bronze in our foundry. The application also required a NEMA 7 electrical housing, which, because of the high temperature was mounted on a ventilated stand-off above the heater. ■



Check out our growing list of standard and custom thermal solutions online at [www.durexindustries.com](http://www.durexindustries.com) or talk with our Durex Application Engineers at 847-639-5600.

Contact Durex Industries for all your heater, sensor and control requirements.



For more information, visit our website! [www.durexindustries.com](http://www.durexindustries.com)

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