

Air Products Brasil's Bundled Offering a Winner for Long-Term Industrial Gas Supply for Guardian Glass' New Float Glass Line

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Cleanfire(R) HRi(TM) Burner Integrated in Expanded Glass Production

LEHIGH VALLEY, Pa., May 19 /PRNewswire-FirstCall/ -- Air Products (NYSE: APD) today announced that its wholly-owned subsidiary, Air Products Brasil, has built, placed on stream, and is operating an air separation plant that provides nitrogen and oxygen for Guardian Industries' new float glass manufacturing plant in Tatui, Sao Paulo, Brazil. Air Products Brasil is also supplying hydrogen, via an on-site plant, and a Cleanfire(R) HRi(TM) burner system for Guardian's new float glass line.

"We were able to demonstrate that significant operational benefits, specifically fuel savings, can be achieved with the grouped offering we presented to Guardian. The combination of our technologies and reliable supply of essential industrial gases can provide Guardian with the most efficient way, both operationally and environmentally, to produce float glass from its new production line. These technologies can continue to provide benefits in the future, as higher fuel and energy costs are anticipated," said Bob Lewis, global marketing manager for Generated Gases at Air Products. Lewis added that the Guardian relationship continues to grow Air Products' presence and investment in meeting industrial gas needs in Brazil.

Air Products Brasil's construction of an air separation unit to produce nitrogen and oxygen is part of the bundled product offering for Guardian Tatui. Air Products Brasil is also operating an on-site steam methane reformer (SMR) to produce hydrogen for Guardian's facility. Air Products' on-site hydrogen product offerings were enhanced in 2008 by the acquisition of Harvest Energy Technology and its novel and patented SMR technology. Further, Air Products' Cleanfire HRi burner advanced oxy-fuel boost application has been integrated into Guardian's new glass production plant.

Float glass is produced by floating a continuous stream of molten glass onto a bath of molten tin. The molten glass spreads onto the surface of the metal and produces a high quality, consistently level sheet of glass that is later heat polished. The glass has no wave or distortion and is now the standard method for glass production. In fact, over 90% of the world production of flat glass is float glass. Float glass can be cut and fitted directly to frames or custom tabletops for making modern windows, or used as raw material in processes such as glass tempering, lamination, and manufacture of mirrors and solar panels.

When introduced correctly, industrial grade oxygen used to displace combustion air in the manufacturing process can significantly improve heat transfer to the glass batch and glass bath. The Cleanfire HRi burner's advanced oxy-fuel boost application offers several unique benefits to glass production. "This technology delivers higher efficiency melting that reduces the amount of fuel consumed to produce each ton of glass. It also reduces the amount of pollutant emissions by delivering a flat flame geometry that incorporates oxygen staging technology," says Kevin Lievre, global glass segment market manager at Air Products. "Customers using this Cleanfire application can expect to increase glass quality, boost production, and decrease emissions of NOx, SOx, CO2, and particulate matter."

Currently there are over 250 Cleanfire HRi burners installed at glassmakers worldwide, and over 1,500 of the Cleanfire family of burner offerings in place at glassmaking operations globally.

About Air Products

Air Products (NYSE: APD) serves customers in industrial, energy, technology and healthcare markets worldwide with a unique portfolio of atmospheric gases, process and specialty gases, performance materials, and equipment and services. Founded in 1940, Air Products has built leading positions in key growth markets such as semiconductor materials, refinery hydrogen, home healthcare services, natural gas liquefaction, and advanced coatings and adhesives. The company is recognized for its innovative culture, operational excellence and commitment to safety and the environment. Air

Products had fiscal 2008 revenues of \$10.4 billion, operations in over 40 countries, and 21,000 employees around the globe. For more information, visit www.airproducts.com.

About Guardian Industries Corp.

Guardian is a diversified global manufacturing company headquartered in Auburn Hills, Michigan, with leading positions in float glass, fabricated glass products, fiberglass insulation and other building materials for commercial, residential and automotive markets. Through its Science & Technology Center, Guardian is at the forefront of innovation including development of high performance glass coatings and other advanced products. Guardian, its subsidiaries and affiliates employ 19,000 people and operate facilities throughout North America, Europe, South America, Asia, Africa and the Middle East. Visit www.guardian.com.

***NOTE: This release may contain forward-looking statements. Actual results could vary materially, due to changes in current expectations.

SOURCE Air Products

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/CONTACT: Media, Art George, +1-610-481-1340, georgeaf@airproducts.com,
or Investors, Nelson Squires, +1-610-481-7461, squirenj@airproducts.com, both
of Air Products /

/Web Site: <http://www.airproducts.com> /
(APD)

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