

# Iconic Tunnel Stays Cool and Preserves the Environment

# WHO

#### Honeywell, Trane, and Eurotunnel

Eurotunnel replaced its cooling system with four Trane Series E<sup>™</sup> CenTraVac<sup>™</sup> large-capacity (2,600 kW to 14,000 kW) chillers using Honeywell Solstice<sup>®</sup> zd refrigerant.

## WHAT

Since the new system began operation, energy use has dropped by 33 percent. In 2017, Eurotunnel saved 4.8 GWh and approximately €500,000.

#### WHEN

Two chillers began operation in 2016 in Sangatte, France. The remaining units at Shakespeare Cliff, U.K., have been operational since October 2017.

### WHY

Round-the-clock cooling keeps the heat generated by high-speed trains passing through the Tunnel under the English Channel from driving indoor temperatures above 35°C (95°F), the maximum allowed for optimal conditions. The new system keeps ambient temperatures at or around a comfortable 25°C (77°F).

#### HOW

Honeywell Solstice zd refrigerant enables customers to reduce their carbon footprint without sacrificing performance. Its GWP of 1 is lower than any other nonflammable solution in the market and is 99.9 percent lower than R-22, the previous refrigerant used in the Tunnel.



#### **Cooling and Savings on the Go**

High-speed rails generate heat, and tunnels hold in that heat. The combination of the highly efficient Trane chillers with Solstice<sup>®</sup> zd refrigerant let Eurotunnel blend energy savings with environmental conservation.

334/0 Eurotunnel's **bold decision** to use the **ENERGY SAVINGS** latest generation refrigerants is paying off already. SAVINGS OF 4.8 GWh

is equal to the energy needed to run **1.000** typical homes



carbon footprint decrease compared to earlier system

consecutive UK Carbon **Trust Standard** certifications for

sustainability efforts

Honeywell olstice<sup>®</sup> zd

ABOUT SOLSTICE zd Solstice zd is a nonflammable, ultra-low GWP replacement for R-123 for low-pressure centrifugal chillers. Its GWP of 1 is 99.9% lower than R-245fa and any other nonflammable solution in the market, making it an environmentally preferable alternative for this application, as well as Organic Rankine cycle (ORC) and high-temperature heat pumps.

#### PUT SOLSTICE zd TO WORK FOR YOU

To learn more about the performance and environmental benefits of Solstice zd refrigerant, contact your Honeywell representative or visit honeywell-refrigerants.com.

#### **Honeywell Advanced Materials**

115 Tabor Road Morris Plains, NJ 07950 800-631-8138

Although Honeywell International Inc. believes that the information contained herein is accurate and reliable, it is presented without guarantee or responsibility of any kind and does not constitute any representation or warranty of Honeywell International Inc., either expressed or implied. A number of factors may affect the performance of any products used in conjunction with user's materials, such as other raw materials, application, formulation, environmental factors and manufacturing conditions among others, all of which must be taken into account by the user in producing or using the products. The user should not assume that all necessary data for the proper evaluation of these products are contained herein. Information provided herein does not relieve the user from the responsibility of carrying out its own tests and experiments, and the user assumes all risks and liabilities (including, but not limited to, risks relating to results, patent infringement, regulatory compliance and health, safety and environment) related to the use of the products and/or information contained herein.



3024 FP REF | June 2018 © 2018 Honeywell International Inc. All rights reserved.

