

DuPont™ ISCEON® MO99™

CASE HISTORY

Hillside Centre Keeps Things Cool with ISCEON® MO99™



Background

20 VIC Management is a property management company in Canada that is conscientious about reducing the environmental footprint of their facilities. 20 VIC had a major air conditioning retrofit project in Victoria, British Columbia at their shopping complex, Hillside Centre. Hillside Centre has a collection of over 100 shops and services, and comfort cooling of the 500,000 square foot facility is of paramount importance to the facility's management.

Operations Manager Mark Evans, aware of the looming R-22 phaseout, wanted to reduce Hillside's dependence on R-22. He was looking for product retrofit options. The project was a large one, with approximately 100 rooftop A/C units that would be retrofitted. Mr. Evans consulted contractor Heinz Rudolph, of Island Pacific Systems, who in turn worked through his local HVAC wholesaler (Refrigerative Supply) and DuPont technical representatives. DuPont™ ISCEON® MO99™ was suggested as "the easy to use" product of choice.

ISCEON® MO99™ is a retrofit refrigerant that combines the pressure-enthalpy characteristics of R-22 with mineral oil compatibility in a unique refrigerant that can be used to replace R-22 in air conditioning and refrigeration equipment covering a wide range of evaporator temperatures.

Project Details

The ISCEON® MO99™ retrofit involved a variety of air conditioning units from Carrier, Lennox, Trane and York. A total of 95 units are being converted, with 60 already completed.

No oil change was needed in the retrofit. The Schrader core and liquid line driers were replaced. Mr. Rudolph commented, "The retrofit couldn't have been easier—it was essentially a drop-in."

In a retrofit using ISCEON® MO99™, the steps to complete the process include recovering the R-22, charging the refrigerants, changing critical seals, restarting and monitoring the system for potential leaks.

The retrofit involved Copeland® and Carlyle compressors, reciprocating and scroll. Refrigerant charge size was 1,000 pounds.

Results

Heinz Rudolph was very pleased with the results of the retrofit. He said, "MO99" works better than R-22, and better than I expected. I enjoyed working with the DuPont tech guys and with our distributor, RSL, on this project. It was a great learning experience. I would definitely recommend ISCEON® MO99™ for A/C."

Conclusion

Mr. Rudolph said, "I was really impressed with how MO99™ works with the units. The systems have been operating with no problems since the retrofit. It's been great."

Mark Evans concluded, "We have properties all over Canada, and we are looking at MO99™ for our other facilities. I recently presented this success story in Toronto to my colleagues to show them there is an easy way to get out of R-22."



The miracles of science™

For more information on DuPont™ ISCEON®, or other DuPont Refrigerants, please contact your local representative.

Dr. Stuart J. Smith
Senior Technical Consultant / Product Stewardship Coordinator
FluoroChemicals
Stuart.J.Smith@can.dupont.com

isceon.com

Copyright© 2009 DuPont or its affiliates. All rights reserved. The DuPont Oval Logo, DuPont™, The miracles of science™, MO99™ and ISCEON® are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates.

NO PART OF THIS MATERIAL MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS ELECTRONIC, MECHANICAL, PHOTOCOPYING, RECORDING OR OTHERWISE WITHOUT THE PRIOR WRITTEN PERMISSION OF DUPONT.



The miracles of science™

K-23251 06/09