

Fact sheet
Official Opening of the Glycol Recycling Centre

Montreal-Trudeau airport De-icing Centre

Opened in 1997 with 5 de-icing bays for an initial investment of \$40 million

En 2012, further investment of \$11 million: 3 de-icing bays added

State-of-the-art underground catchment system allows used de-icing fluids to be collected and recycled.

Operates from: October 1 to April 30

Trucks: 24

De-icing bays: 8

Capacity: up to 48 aircraft per hour (depending on weather conditions)

Statistics:

9,400 aircraft de-iced per year (average)

5.7 million Litres de-icer applied per year (2013-14)

Key steps in the design and construction of the glycol recycling centre

Design and construction: Aéro Mag

Providers:

Equipment provider: Vilokan (Sweden)

De-icing product certification: LNT Solutions

Construction Première: building

Building expanded by 10,000 ft²

March 2013

Concentrator installed; increased glycol concentration to 50–55%

Summer 2014

Distillation tower installed; increased glycol concentration to 99.5%

Fall 2014

New glycol recycling centre opened

First airport in the world to achieve a glycol concentration of at least 99.5% and re-use recycled product as a certified aircraft de-icer.

Investment

\$10-million project investment, broken down as follows:

- ADM contribution: \$7.1 million
- Funding from Aéro MAG: \$2.9 million

Process



Step 1

Tanks rooms.

Glycol recovered from the de-icing apron flows into these storage tanks.



Step 2

Glycol is transferred to holding/buffer tanks for the start of the recycling process.

Process: Separation of water and particles. Glycol concentration is increased to 50–55%.



Step 3

Distillation tower

Glycol concentration is increased by distillation to 99.5%.



Step 4



Step 4 – cont'd
Quality-control tanks.



Step 5

The large white tank at left receives distilled product awaiting re-certification.



Step 6
Recycled, re-certified glycol is pumped into trucks to be re-used.



Step 7
Aircraft de-icing.

October 29, 2014