



New method for cleaning snow and ice on apron airports

Introduction

There are satisfying methods to clean runways from snow and ice nowadays. Unfortunately this doesn't apply to aircraft stands, taxiways, pushback tractor ways, baggage tractor ways, and many other surroundings around aircrafts.

Current winter related problems are:

- Ice lumps, ice layers and snow often hinders wheels of passenger bridges, causing problems with steering and driving; or the wheels spin due slipperiness and losing its grip or steering is difficult because of ice lumps in the red line area.
- The driving path for pushback tractors is often slippery due frozen up snow and ice, creating problems pushing back the aircraft.
- Baggage trolleys and tractors always face problems with snow, causing delays in baggage claims.
- Snow and ice on parking platforms create problems for the tow tractor, a path must be cleaned to be able to take the aircraft from the platform.
- Fire departments and environment protecting groups can't remove oil spills because the degreaser fluid freezes up at a temperature under zero. This create nightmare's because slipperiness only increases.









We, Liberty Gasturbine Holland, have resolved all these problems in the last winter period at Amsterdam Airport, Holland and Zaventem/Brussels Airport, Belgium.

During the period from week 51/09 to week 2/10 the SurfaceJet proved to be successful at these airports.

Resolving slipperiness problems on stands and on above mentioned places is possible by using the SurfaceJet, a product of Liberty Gasturbine Holland.

The work we performed at Schiphol and Zaventem:

Removing snow and ice accretion, layers of ice, and ice lumps from:

-  Stands
-  Taxiways/ crossings
-  Service ways
-  Pushback tractor routes
-  Baggage trolley/tractor routes
-  Red area/passenger bridges
-  Assisting fire departments cleaning oil from tarmac while freezing
-  Cleaning walkways

The SurfaceJet

Re-invented in 2005 and used on Schiphol Airport. Later used by basically all the larger road constructors in Holland for drying and heating up surfaces for many purposes.

A self driving unit, mounted on a Mercedes Sprinter, appears to be the final breakthrough in the market in 2008. A major advantage proved to be its flexibility and maneuverability.

The system consist of a small jet engine, a special design air diffuser, a computer control unit and a car. The temperature of the produced air is approx. 400 degrees Celsius. The temperature, airflow, diffuser height and speed is adjustable and is fully controlled by the operator.

The entire system is equipped with all the necessary safety demands involved. Surface temperature is monitored constantly, the system is protected from excessive heat transfer, a standard feature.

Introduction and presentation.

Because of its recent success we decided to approach the European market of airfields, which are facing problems of harsh winter periods.

We would like to get an opportunity to introduce ourselves and present our SurfaceJet, in a short meeting . In this open conversation we can explain all the details and answer any question. We are quite happy to visit you at your airport.

Liberty Gasturbine Holland truly believe that we can resolve major winter related problems at your airport.

Some recent pictures



Removing ice layers from a runway



See the difference on the tarmac.....



Removing ice layers from passenger bridges area's



Brake ice layers and lumps and blowing it off from the stands



Restoring a remote stand



Where were the lines?



Melting snow and ice on the parking platforms

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