

Degradation of de-icing agent Airport Jersey, Jersey, England



Jersey Airport Ltd.
<http://www.jerseyairport.com>

Operation
Pond with 4 OLOID Type 400

Period
Since 2004

Success
Degradation of organic de-icing
agent

Problem

Rainwater from runways, start and landing strips and other airport surfaces is contaminated with a variety of substances, often collected in ponds or pools. Particularly high is the load in winter when de-icing agents contaminate surface water. These de-icing agents are biodegradable. If the residence time in the ponds and pools is sufficiently high, the biodegradation can be done there. For this purpose, usually a ventilation of these ponds is needed. Because of high energy consumption and partially insufficient circulation rate, conventional aerators are often ill-suited.

Customer benefits

- efficient ventilation and circulation with only 250 W per unit
- at high oxygen demand combination of conventional aerators and OLOID agitator for better circulation and oxygen distribution
- Process safety through continuous operation with very low power consumption
- Resultat

In winter, when the surface water of the airport is loaded with de-icing agents, the water is first fed into a pond and then into a reed bed.

In the pond are 4 OLOID Type 400A aerators installed to ensure the reduction of the BOD₅ load at a power consumption of only 1000 Watts.