DICE - Airfield lighting Dry Ice Cleaning Equipment



Efficiency & speed

Visual Aids play a critical role in terms of flight safety and regularity. Airfield Lighting equipment must therefore ensure a System Availability close to 100%. Regular use of runways and taxiways and environmental conditions generate dirt that could hamper the category of the airport and could lead to its closure in bad weather conditions.

FB Technology, owing to its strong airport works experience has therefore developed a new product for the periodic cleaning operations of airport lighting systems. The efficiency and speed of the maintenance unit have demonstrated that this is the perfect complement to the airport technical services.

Example description of the supply

- Cleaning machine for inset and for elevated lights (excluding very high approach units)
- Compressor in option
- Trailer in option

Regulatory material

The mobile unit should be equipped with the regulatory material to enter and operate on any airport site (optional):

- Fixed VHF radio link in vehicle
- Portable back-up VHF radio link
- Vehicle equipped with flashing beacon light
- Regulatory signals on the vehicle
- etc...

Cleaning system

This product is designed for airports wishing to use safe and advanced equipment for cleaning their inset and elevated lights with the greatest efficiency and under all weather conditions. It uses the cryogenic technology by projecting carbon dioxide ice pellets under pressurized air.

This process has been confirmed by the ADEME (French Environmental Agency - Agence Française de l'Environnement) as being an ecological tool in compliance with the current Standards.

System Description



FB Tech has developed a cleaning system that can be either installed in a vehicle or on a trailer allowing for rapid intervention, and in difficult climatic conditions.

The operator manipulates an arm fitted with pressure compressed-air injector. The control is carried out by using a push-button installed on the arm. The cleaning operation is done by projecting a mix of air and ice pellets on the light prism. The operation causes <u>no damage</u> to the prism and does not pollute the environment, neither attracting nor favouring development of the fauna surrounding the platforms (rodents, birds, etc.). No residual are left on the runways or taxiways.

All types of inset or elevated (height < 50 cm.) lights can be cleaned efficiently and allow for total removal of the following forms of dirt:

- Rubber from aircraft tyres
- Calcium deposits
- Glycol
- Paint spray/splashing from night / daily marking
- Salt

The equipment design gives it great flexibility while its speed (few seconds per light) allows operations between aircraft movements. The projection machine has been designed by simplifying it at best in order to reduce the breakdown risks and the operating costs.





The equipment can be installed inside the Airport maintenance vehicles that will pull a compressor 7bars/ 5000litres or on a specifically designed trailer where compressor, the dry-ice container and the machine are fitted. Contact us to define your requirements.