

# 1000 system

SAFE ON THE SURFACE



**addagrip**



# addagrip 1000 system

## Concrete Pavement Protection System

The Addagrip 1000 System Resin has been specifically developed to seal and protect concrete surfaces from erosion, chemical attack\* and aviation fuel spillage. The 1000 System Resin, saturated with chosen aggregates, provides increased wear and anti-skid qualities. Typical areas treated with the Addagrip 1000 System Resin include aircraft stands, taxiways, runway ends, helipads, concrete roads and ramps.

A major problem with concrete is that deterioration is caused by latent defects, chemical attack and frost damage, which over a period of time causes the top of the concrete to break down. This breakdown may cause a safety or FOD (Foreign Object Damage) problem requiring removal of the affected areas.

## Preparation

The surface preparation to the concrete surface is carried out by applying controlled Hot Compressed Air.

The Addagrip Hot Compressed Air System is a combination of propane gas and compressed air ignited in a chamber. The mixture burns at a temperature of approximately 1000°C with the exhaust exiting the chamber at a rate of 350m per second.

As the heat blast comes into contact with the surface it causes any water, oil or liquid contaminants to vaporise from the top few millimetres. These quickly evaporate from the surface and are blown away by the heat blast, leaving the surface capillary pores empty and open, ready to receive the Addagrip 1000 System Resin.

## Application

The 1000 System Resin is then applied to the prepared surface as specified. The coverage rate will vary depending on the porosity, texture and size of aggregate to be used. Application of the resin is by roller and squeegee or spray machine to large areas. As the surface cools the 1000 System Resin will be drawn down into the open and empty capillary pores. This penetration of resin, typically 2-3mm, will lock into the structure of the concrete preventing migration of moisture. The 1000 System Resin should then be saturated with a chosen washed, clean and dry aggregate to provide the finished surface. Treated areas should be thoroughly swept to remove excess aggregate.

Comments from *RNAS Culdrose*, Cornwall, that have had over 80,000m<sup>2</sup> treated since 1993 are as follows:

*“It substantially prolongs the life of the concrete pavements and is more cost-effective and less disruptive than removing and replacing slabs.”*

*“Our longstanding use of the product is testimony to how good it is, in particular for airfield applications.”*

*\*Please provide details of chemicals to confirm suitability.*



*Radom – Poland and  
RNAS Culdrose*



*The Addagrip 1000 System Resin applied directly onto the prepared pavement is designed to prevent further deterioration. Areas treated over the last twenty years at military and civil airfields have prevented further deterioration, prolonging the life of the concrete pavement by an estimated 10-15 years.*

## Sites that have used the Addagrip 1000 System

RNAS Culdrose, RNAS Yeovilton, RAF St Mawgen, RAF Wittering  
DERA Boscombe Down, RAF Odiham, RAFC Cranwell, RAF Cottesmore  
RAF Lakenheath, RAF Marham, RAF Waddington, RAF Aldergrove  
RAF Leuchars, RAF St Athan, RAF Northolt, RAF Kinloss, RAF Coningsby,  
RAF Mount Pleasant Falkland Islands

London Gatwick Airport  
London Heathrow Airport  
Birmingham Airport

Okecie, Radom and Lask Airfields – Poland

Bodo and Bergen Airport – Norway



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**BASEA**  
British Airport Services & Equipment Association

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