

# DRY ICE



## CRYONOMIC CLEANING



DRY ICE UK Ltd are able to offer an alternative solution to the removal of surface contaminants.

By using the latest in cryonomic technology, our skilled and fully trained Technicians can provide a dry and abrasion free clean that altogether is non-toxic, non-corrosive and is an environmental alternative to the use of solvents or hazardous chemicals.

Cryonomic Blast Cleaning operates by introducing dry ice pellets into a pressurised air stream which is then accelerated to over 300m/s. The impact of the pellets on the target surface removes unwanted

dirt and contamination, leaving the surface dry and abrasion free. As the pellets immediately sublime on impact (turning from solid to gas), there is no secondary waste disposal necessary.

[www.dryiceuk.com](http://www.dryiceuk.com)



# DRY ICE

## CRYNOMIC CLEANING

### WHY IS IT SO EFFECTIVE?

**Kinetic Energy** – the velocity and mass of the pellets upon impact transfers the required energy to remove loose contaminant.

**Thermal Differential** – the temperature of dry ice is -78°C and this causes rapid cooling on impacting the surface. Differences between the contraction rates of the contaminant and the surface behind promote contaminant fracturing and a reduction in adhesion.

**Reverse Fracturing** – pellets impact between contaminant cracks and immediately sublime, expanding to over 500 times their original volume, pushing it cleanly away from the surface being cleaned.

### A RANGE OF APPLICATIONS

General maintenance of machines and production lines, welding robots, printing processes, chain and conveyor systems.

Cleaning of injection, extrusion and casting moulds, tanks and ovens, concrete, marble, glass and ceramics, electrical/electronic components.

Removal of glue, resin, grease, carbon deposits, asbestos, nuclear decontamination, mastics, bitumen, mineral oils and organic growth.

### INDUSTRY EXAMPLES

ESTABLISHED INDUSTRIES	TYPICAL CONTAMINANTS REMOVED
Aerospace	Paints, carbon deposits, greases and waxes
Automotive	Weld splatter, foam, sealants and release agents
Electrical	Carbon deposits and grease
Fire/Restoration	Carbon deposits from smoke/fire damage
Food	General food wastes and carbon deposits
Foundry	Grease, weld spatter and lubricants
Laminate Board	Glues, varnish and resins
Local Government	Graffiti, chewing gum, organic mould growth
Packaging	Holt melt adhesives, ink overspray, label adhesives
Printing	Inks, paper dust and glues
Rubber and Plastics	Rubber, plastics and polyurethane deposits

### DEMONSTRATIONS

DRY ICE UK Ltd will be happy to conduct demonstrations in order to verify applications. Please contact our office in order to arrange a demonstration.

### Key Advantages

#### NO CHEMICALS

- Eliminates the need for chemical storage on site.
- Chemical handling issues removed for personnel.
- No post-cleaning chemical residues.



#### REDUCE WEAR

- Reduced wear as process is gentle and non-abrasive
- Highly effective in reaching areas other methods miss
- Ideal for moulds and dies that need accurate surfaces



#### NO LIQUIDS

- Saves water consumption in water sensitive areas
- Dry ice sublimates on contact so no wet floors are left behind
- No evaporation means no change in relative humidity to affect other on-site processes.



#### REDUCED DOWNTIME

- In-situ cleaning with mobile units reduces non-operational time significantly
- No drying out time required
- Reduced dismantling of machinery means less downtime



**Call 0800 0842 040 for sales and general enquiries**

or visit our website for more information: [www.dryiceuk.com](http://www.dryiceuk.com)

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