

bdIS

Your partner in the Middle East

Introduction

Buzwair Industrial Gases Factories (Qatar) have recently joined forces with BSP (Ice) Limited from the UK to form a new dry ice production company based in Doha and have also joined with Ice Cleaning Environmental Limited from the UK to offer dry ice blasting services

BDIS takes more than 50 years experience of one of the finest gas companies in the whole GCC and coupled that with the modern technology of BSP & ICE Ltd to bring a whole new service to the region.

The intention of our facility is to offer high quality Dry Ice pellets to support our blasting services ensuring our teams are using the best possible equipment and consumables enabling them to achieve the highest possible results.

BDIS will offer products and services to the highest standard in the whole GCC and look forward to introducing ourselves to your business to help you improve the services you give others.

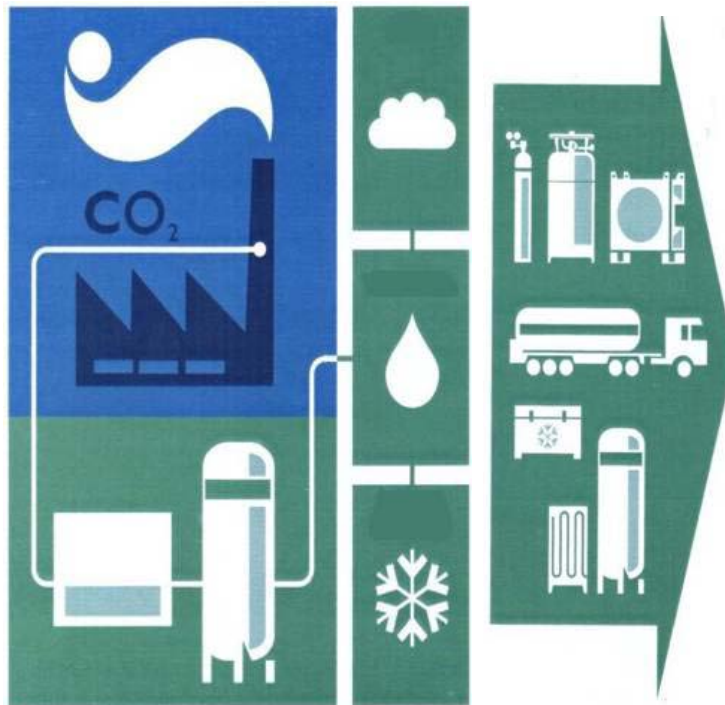
Contents

- Co2
- How does Dry Ice Blasting Work?
- Equipment Required
- Where is it used?
- Frequently Asked Questions
- Benefits
- Q & A

CO2 a versatile and useful product

CO2 is sourced as a by-product from:

- Steam reforming
- Ammonia
- Natural CO2
- Natural gas
- Ethanol
- Others



Applications



Transport cooling



Gas propellant



Medical Treatment



Fire fighting



Pulp & Paper



Perfume



Manufacturing



Chemicals



Dry ice blast cleaning



Food processing & beverages



Greenhouses



Entertainment



Water treatment



CO2 Dry cleaning

How Does Dry Ice Blasting Work? Four Stages

Impact

Kinetic energy transported by sonic force as dry ice makes impact

Thermoshock

Sudden cooling creates intense thermal tension

Embrittlement

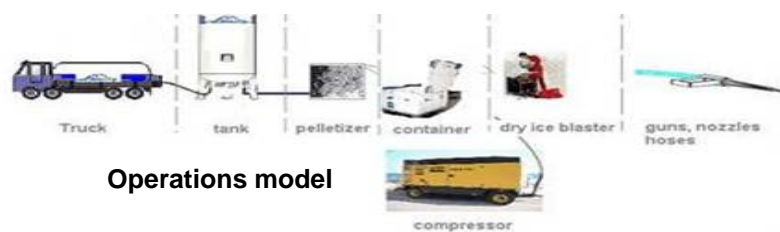
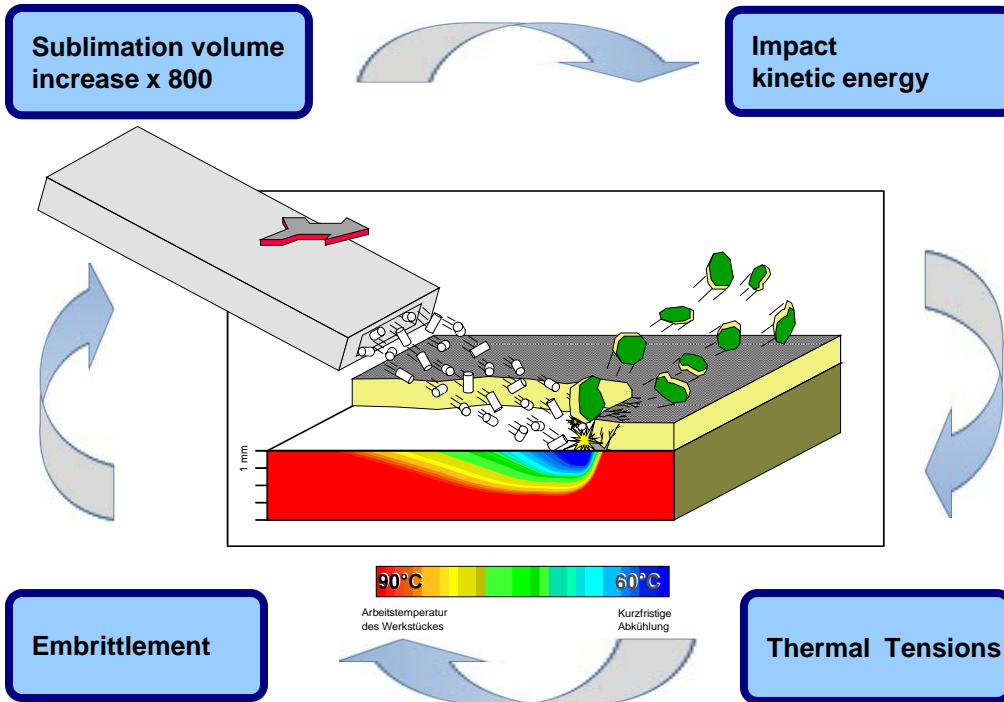
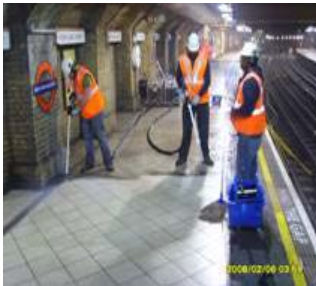
Material hardens under cooling making it easier to be removed

Explosive Sublimation

Pellet explodes to approximately 800 times its original size on impact

Cryogenic Dry ice Cleaning

Cleaning effects of dry ice blasting & how it works



Operations model

Dry Ice being produced



3mm Dry Ice Pellets



Dry Ice



Equipment

Compressor

Operating pressure 4-14 bar

Flow minimum 11 cubic meters/min



Blasting Machine

Cryo series



Competent Operator

With a broad in-sight to various
Cleaning applications & services.



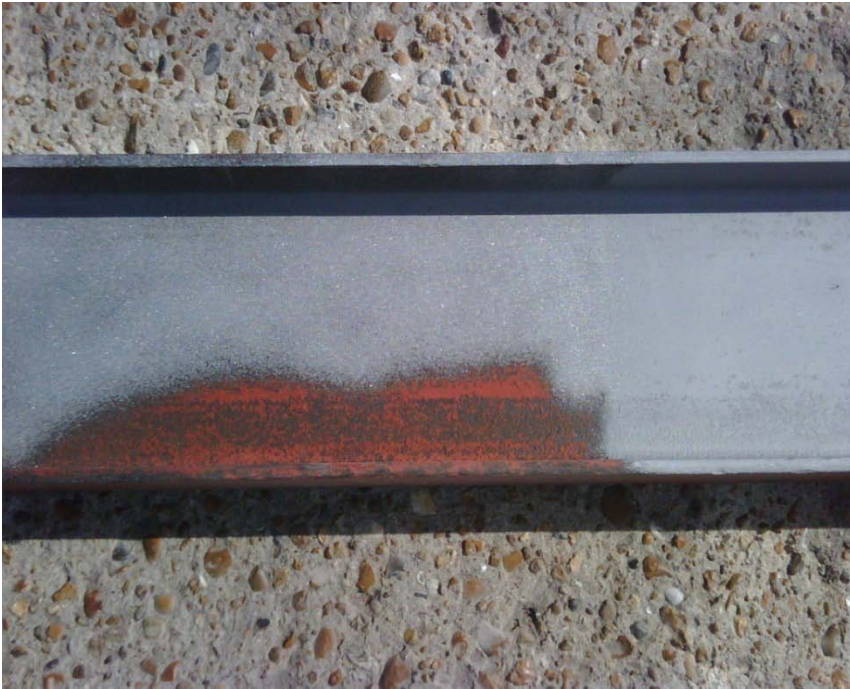
Removing Lead Paint Putney Bridge LU station



Removing Paint from Rendered Surface



Surface Preparation



Where Is It Used?

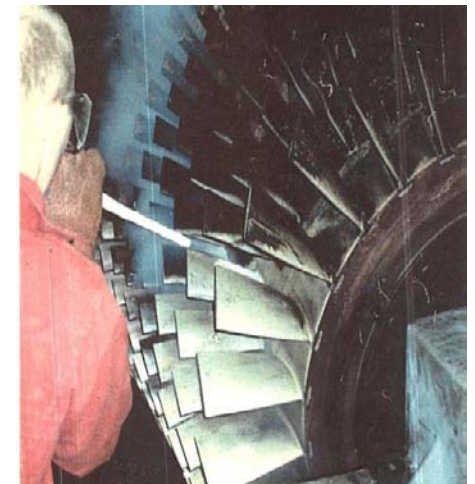


Containerised system for use on refineries used for dry ice cleaning of smaller components

Where is it used?



Further Applications



Before & Afters



What are the benefits of Dry Ice Blast Cleaning?

- It produces no waste material as the dry ice sublimates unlike shot or sand.
- It is dry and so can be used on electrical components.
- It minimises downtime as machinery does not need to be disassembled to be cleaned.
- It is more environmentally friendly than cleaning with solvents
- Can be as gentle as dusting smoke damage from books or as aggressive as removing weld slag from tooling.
- Is faster than hand cleaning and more effective in hard to reach spaces.

How BDIS can help you and your customers

- Local professional full service operation
- Unparallel professional support
- Use of high quality blasting grade dry ice supplied in specialist containers
- BDIS is a ISO 9001 certified company