## **CRYOBLASTING** CRYOGENIC CLEANING





## The expert in dry cleaning for all surfaces

Dryce's main mission is to ensure that our customers get the highest level of cleanliness for their machinery and manufacturing processes.

We design, build and test innovative and eco-sustainable technologies to keep machines, tools and components constantly clean.

Dryce is the global partner for zero environmental impact cleaning operations. Our technologies do not pollute, do not use harmful chemicals, and the energy consumption of our cleaning systems is among the lowest on the market



Company	04	
Dryce is a leading company in the design and production of dry cleaning machines for all surfaces.		
Cryogenic Cleaning	06	
The new method of cleaning materials.		
Cleaning system		
Cryogenic sandblasting	09	
Jet Clean	10	
Jet Clean 2.0	11	
Product Portfolio		
GT Cubo Easy	13	
GT Cubo	14	
GT 25 MY2016	15	
Accessories / Nozzles	16	
Accessories / Nozzle Holders and Nipples	18	
Accessories / Hoses, Covers and PPE	19	

## DRYCE CRYOBLASTING

## Dryce is a leader in the design and production of dry cleaning machines for all surfaces

We are committed to innovating and ensuring the top-notch quality level of our products, devoting attention to the environment, taking care of our customers to better understand, and striving to meet their current and future needs and aspirations.



**Customer Care** 

Attention to customers, to better understand their needs.



Innovation

To guarantee a ongoing upgrade of our products and services.



Quality

Striving constantly to improve our products and services

### Values

The values we share guide us in everyday challenges.

### **Quality & Certifications**

We adhere to high quality standards of products and services, such as UNI EN ISO 9001: 2015.

We put all our passion and experience into the market where we operate; we conceive our business as a commitment to delivering high-quality products and services, in the hope of exceeding your expectations.

### **Mission & Vision**

We pursue our Mission on a daily basis, thanks to our dedication to the work we are extremely passionate about.

At the heart of our commitment is the desire to keep listening and learning from our Customers, in order to understand their current and future needs, finding increasingly effective and sustainable solutions, both from an economic and environmental point of view.



**Know-How** 

Constant know-how development, in order to anticipate future market needs.



#### Attenzione all'Ambiente

To defend and safeguard the future of our children and our planet.



#### Lavoro di Squadra

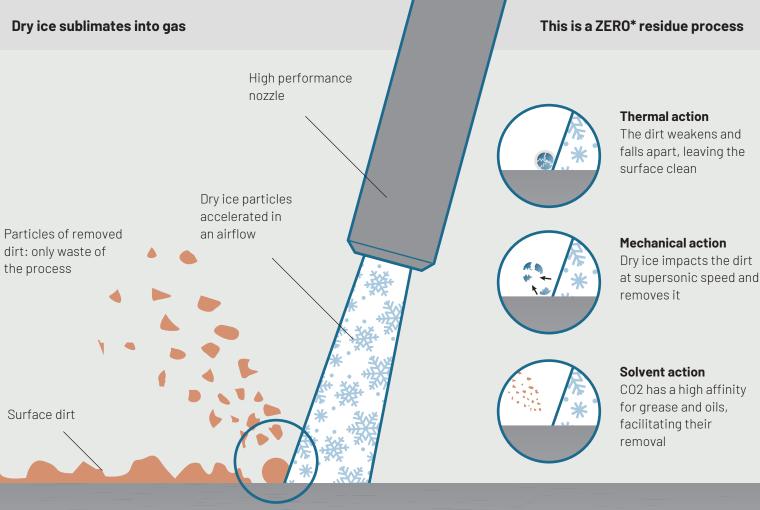
To focus every individual effort on the achievement of a common goal and vision.

## **CRYOGENIC CLEANING**

Cryogenic cleaning is an extremely versatile and effective technique, used when it is important to remove a surface layer of dirt, even ground-in dirt, and there are no other quick and/or effective methods available. The process uses dry ice particles, which vary in size according to the specific type of cleaning technology involved.

The particles of dry ice, which are accelerated against the surface to be cleaned, broke upon impact and at the same time cool the layer of dirt they hit.

The combined action of the cleaning particles' impact, together with the thermal shock generated by the localized cooling (dry ice refrigerates the material to be cleaned), result in a rapid and complete removal of dirt.



#### SURFACE TO BE CLEAN

\* Dry ice cleaning leaves no waste, excluding the material removed in the process.



## CRYOCLEANING TECHNOLOGIES

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Preparation for coating of resin components

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Rubber extrusion and molding

and flat

Electronic Industry,

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PCB and SMD components

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glass molding

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Molding and coating of

Tire, rubber and silicone vulcanization presses

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Die-cast aluminium molding

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Optical units and thermoset + plastics molding

Monuments, civil and industrial flooring

Extrusion of aluminum profiles

### CRYOBLASTING

#### **Applications**

› Foundry molds

Gravure printing

> Rubber and silicone molds

> Baking ovens

> Pharmaceutical Industry

Cryogenic Sandblasting uses 2,9mm diameter dry ice pellets as a cleaning agent.

The pellets are supplied in isothermal containers and are ready to use.

### Technology

Patented system developed by Dryce, capable of high cleaning performance due to careful optimization of the fluid dynamics, which regulates the acceleration of dry ice particles.

Dryce technology makes it possible to achieve high performance, with very low specific consumption of dry ice and minimum electricity consumption.

### **Benefits**

Whenever it is necessary to remove ground-in dirt, or when it is complicated to disassemble parts of systems to be cleaned, cryogenic sandblasting is the perfect solution, since it quickly gives a new look to equipment and tools without moving or disassembling them.

After cleaning, there is zero waste and no risk of abrasion and/or scratching of the treated surfaces.



By appropriately selecting the nozzle model and dialing up or down the pressure, you can modulate the intensity of the cleaning jet, according to actual needs.

**CLEANING ONLINE MACHINERY** There is no need to disassemble the units



**DRY PROCESS** There is zero waste disposal

### JET CLEAN

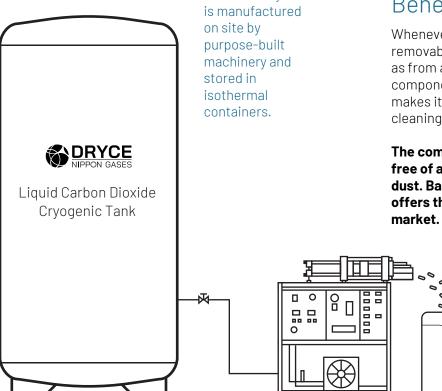
### Applications

Automotive

#### › Coating

› Plastic Painting

**Jet Clean** uses <1mm diameter dry ice pellets as a cleaning agent.



Jet Clean dry ice

### Technology

System designed for cleaning plastic material, such as ABS resin profiles, Nylon, Polypropylene, Rubber and Silicone. The cleaning medium consists of sub-millimeter particles of dry ice, accelerated in a high speed compressed airflow.

The process generates a very gentle cleaning flow. The pellet breaks and sublimates upon impact with the surface to be cleaned.

### Benefits

Whenever it is necessary to remove easily removable dirt from a delicate surface, such as from an ABS profile of an automotive component before painting, this technology makes it possible to achieve excellent cleaning results in a short time.

The component remains perfectly intact and free of any trace of dirt, resin, oils and/or dust. Based on its performance, Jet Clean offers the most reliable technology on the market.



**ECO-SUSTAINABLE** No harmful chemicals



**FAST CLEAN** Rapid and clean process



Removal of oils, grease and electrostatic powders

### **JET CLEAN 2.0**

### **Applications**

› Automotive	
› Coating	
› Plastic Painting	
<ul> <li>Electronics</li> </ul>	

Jet Clean 2.0 uses liquid CO2, which is used, during the cleaning process, to produce dry ice micro pellets as the cleaning agent.

Liquid CO2 is supplied in cylinder packs or cryogenic tanks, depending on the expected consumption of carbon dioxide.

### Technology

This system is designed for cleaning plastic material and electronic components. The cleaning agent consists of dry ice microparticles, accelerated in a compressed airflow.

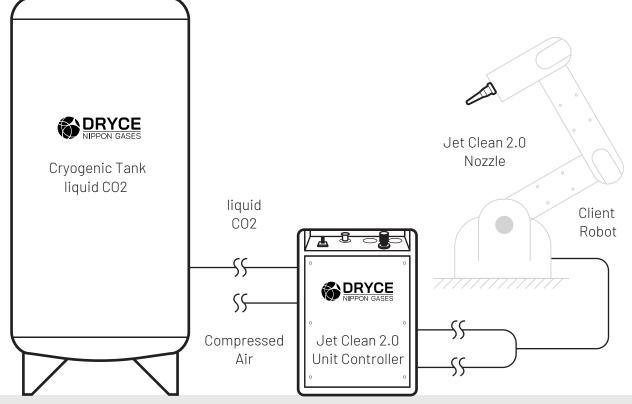
This technology is integrated into a robotic cleaning process and requires only minimal input from operators.

#### This is the most non-invasive cleaning technology available on the market.

### **Benefits**

Whenever it is necessary to get rid of easily removable dirt from a delicate surface, such as the ABS profile of an automotive component before painting, this technology makes it possible to achieve excellent cleaning results in a very short time.

The component remains perfectly intact and free of any trace of dirt, resin, oils and/or dust.



## PRODUCT PORTFOLIO

### CRYOGENIC SANDBLASTER **GT CUBO EASY**



Ideally suited for any environment where manageability, small volume and cleaning power are a must.



### Thumbnail Sketch

- > High load capacity
- > Optimized energy consumption
- > Reduced weight and volume
- > Ideal for work at heights
- > Rear construction wheels for easy handling



### **Technical Specifications**

Item Code	D-SC-SC-CUBOEASY01	
Weight	kg	77
Size(exterior)LxPxH	(mm)	590 x 800 x 960
Hopper capacity (optional)	kg	12
Power supply voltage	-	220V-50Hz
Operating pressure	barg	0,1÷10
Dry Ice capacity	Kg/min	0,1÷1,3

### CRYOGENIC SANDBLASTER **GT CUBO**

High cleaning performance, suitable for any use.

Powerful and easy to use, its results are unrivaled.



### Thumbnail Sketch

- > High load capacity
- > Maximum cleaning power
- > Highly efficient compressed air
- > Automatic hopper unloading
- > High cleaning performance



### **Technical Specifications**

Dry Ice capacity	Kg/min	0,1÷1,8	
Operating pressure	barg	0,1÷10	
Power supply voltage	_	220V-50Hz	
Hopper capacity (optional)	kg	25	
Size(exterior)LxPxH	(mm)	560 x 930 x 980	
Weight	kg	108	
Item Code - Standard Mod.	D-SC-SC-CUBO		

Item Code - Hopper equipped Mod.

D-SC-SC-CUBO-TR



# CRYOGENIC SANDBLASTER



Dryce's top-of-the-line product.

Its ultra-high performance and load capacity ensure maximum flexibility.



### Thumbnail Sketch

- > Maximum load capacity
- > Digital pressure indicator
- > Remote pressure and flow
- regulation on the nozzle holder
- Highly efficient compressed air filter
- > Automatic hopper unloading
- Superb cleaning performance
   on ground-in dirt



### **Technical Specifications**

Item Code	D-SC-SC-GT25-PKG-F	
Weight	kg	125
Size(exterior)LxPxH	(mm)	600 x 960 x 108
Hopper capacity (optional)	kg	35
Power supply voltage	-	220V-50Hz
Operating pressure	barg	0,1÷15
Dry ice capacity	Kg/min	0,1÷2,0

# CRYOGENIC SANDBLASTING



#### Nozzle GT 301

Medium-high performance with a large outlet size, designed for heavy-duty applications.

Item Code	D-SC-RI-UG-GT301	
Range up to 5,5 barg	NI/min	4.000
Outlet Section Width	mm	26
Outlet Section Shape	-	rectangular
Nozzle Length	mm	590



**Nozzle GT 302** Compact and easy to handle, ideal for working in indoor/limited spaces, designed for a wide range of applications.

ltem Code	D-SC-RI-UG-GT302	
Range up to 5,5 barg	NI/min	4.000
Outlet Section Width	mm	26
Outlet Section Shape	-	rectangular
Nozzle Length	mm	300



**Nozzle GT 303** High power nozzle, designed for extra heavy-duty applications.

ltam Oada		
Range up to 5,5 barg	NI/min	4.000
Outlet Section Width	mm	12,8
Outlet Section Shape	-	circular
Nozzle Length	mm	590

Item Code

D-SC-RI-UG-GT303



Nozzle GT 304 Medium performance and large outlet section, not designed for heavy-duty applications.

Nozzle Length	mm	590
Outlet Section Shape	-	rectangular
Outlet Section Width	mm	40
Range up to 5,5 barg	NI/min	4.000
Item Code	D-SC-RI-UG-GT304	



#### Nozzle GT 308

Compact, high power nozzle designed for extra heavy-duty applications.

Item Code	D-SC-RI-UG-GT308	
Range up to 5,5 barg	NI/min	4.000
Outlet Section Width	mm	12,8
Outlet Section Shape	-	circular
Nozzle Length	mm	300



#### Nozzle GT 313 FM

Compact nozzle, designed for particularly delicate applications, ideal for use on wooden and plastic surfaces.

Item Code	D-SC-RI-UG-GT313-FM	
Range up to 5,5 barg	NI/min	6.600
Outlet Section Width	mm	76
Outlet Section Shape	-	rectangular
Nozzle Length	mm	250

#### Nozzle GT 320

Nozzle with large outlet section, designed for delicate applications.

Item Code	D-SC-RI-UG-GT320	
Range up to 5,5 barg	NI/min	7.800
Outlet Section Width	mm	76
Outlet Section Shape	-	rectangular
Nozzle Length	mm	250



### Nozzle GT 320 FM

Nozzle with large outlet section, designed for extremely delicate applications.

Item Code	D-SC-RI-UG-GT320FM	
Range up to 5,5 barg	NI/min	6.600
Outlet Section Width	mm	76
Outlet Section Shape	-	rectangular
Nozzle Length	mm	450



#### **Nozzle Holder**

Ergonomic Nozzle holder, light alloy, complete with swivel rear connection -  $1^{\prime\prime}$  - 5/16 JIC.

Rectilinear rear connection complete with swivel

Quick jointing system for sandblasting nozzle

Safety switch.

**Item Code** 



**Sandblasting Hose** Flexible Sandblasting Hose with electric Cable and Connector 

 Sandblasting Hose DN20

 7 Mt. with Cable and Connector

 Item Code
 D-SC-RI-MS-DN20-7M

 Sandblasting Hose DN25

 7 Mt. with Cable and Connector

 Item Code
 D-SC-RI-MS-DN25-7M



**Compressed Air Hose** Flexible compressed air hose with stainless steel safety cable.

Compressed Air Hose

10 Mt. with Cable and Connector - Pmax 17

Item Code

D-SC-RI-MA-10MT



Cryogenic Sandblasters Protective Cover

Protective Cover for GT CUBO EASY

Item Code

Protective Cover for GT CUBO

Item Code

Protective Cover for GT 25 MY2016

Item Code

D-SC-RI-COPPR0-03



#### Dryce S.r.l.

Headquarters and Directorate Via Aosta, 5 - 20063 Cernusco S/N(MI) info@dryce.it

**Customer Care** Tel. +39 02 92393501