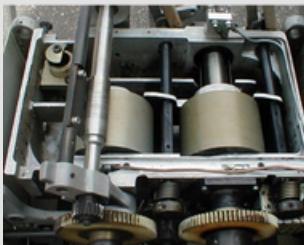




# DRY ICE SOLUTIONS

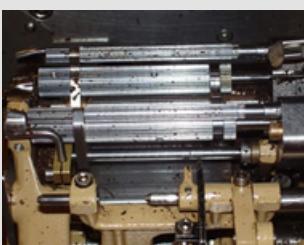
CLEANING & PRODUCTION  
Mail: [gary@dryicen.com](mailto:gary@dryicen.com)



**Dryicen**



**Dryicen**



## MODEL

PureBLAST Nano

PureBLAST Mini

Nozzles included

4mm-1,5 m3/min  
5mm-2,5 m3/min

4mm-1,5 m3/min  
5mm-2,5 m3/min

Hose standard

5 meter (1/2") technical  
rubber without silicone

5 meter (1/2") technical  
rubber without silicone

Pressure

2-10 bar

2-12 bar

Dry ice consumption

10-30 kg/hr

10-30 kg/hr

Hopper size

3 kg

8 kg

Width (Including wheels). 350 mm

480 mm

Depth

350 mm

550 mm

Height

470 mm

610 mm / 895 mm

Weight

19 kg

39 kg

Vibrator

Air

Electrical

Pressure regulator

Festo 1/2"

Festo 1/2"

Chassis

Stainless steel

Stainless steel

### Air consumption:

**Minimum**

**1.200 L/min**

**1.000 L/min**

**Ideal**

**2.600 L/min**

**2.000 L/min**

**Maximum**

**3.600 L/min**

**3.600 L/min**



MODEL      PureBLAST 2500      PureBLAST 3000

Nozzles included	4mm-1,5 m3/min	1 short nozzle with 3 inserts of choice: 5 - 6 - 7 - 8 - 9 - 10 mm
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**dryicen**

Hose standard	7 meter (3/4") technical rubber without silicone	7 meter (3/4") technical rubber without silicone
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**dryicen**

Pressure	2-12 bar	2-16 bar
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Dry ice consumption	25-90 kg/hr	25-90 kg/hr
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**dryicen**

Hopper size	23 kg	25 kg
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Width (Including wheels).	500 mm	400 mm
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**dryicen**

Depth	700 mm	780 mm
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Height	900 mm	1110 mm
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Weight	81 kg	95 kg
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Vibrator	Electrical	Electrical
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Pressure regulator	Festo 3/4"	Festo 1"
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Chassis	Stainless steel	Stainless steel
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<b>Air consumption:</b>		
Minimum	<b>2.000 L/min</b>	
Ideal	<b>5.000 L/min</b>	
Maximum	<b>15.000 L/min</b>	<b>2.000 L/min</b>
	<b>5.000 L/min</b>	<b>5.000 L/min</b>
	<b>25.000 L/min</b>	



## PureBLAST Nano

The PureBLAST Nano Air is a compact yet powerful air-driven dry ice blaster, specifically designed for maximum efficiency in industrial cleaning. Its small size and versatility make it the perfect choice for various cleaning applications, offering numerous advantages that set it apart from traditional methods.



### Key Benefits of the PureBLAST Nano Air:

- 1. Air-Powered for Flexibility:** The PureBLAST Nano operates entirely on compressed air, allowing you to clean without the need for electrical power.
- 2. Compact design, high performance:** Despite its compact size (35 x 35 x 47 cm), the PureBLAST Nano offers high cleaning power, strong enough for tough cleaning tasks.
- 3. Efficient Dry Ice Usage:** The 3 kg hopper provides just the right amount of dry ice for approximately 10 minutes of cleaning.
- 4. Reduced Downtime and Maintenance:** The PureBLAST Nano is designed to keep your machines running optimally with minimal disruption to production.
- 5. Stationary and Portable Options:** Its lightweight design makes it easy to transport, while multiple installation points provide cost-effective solutions for large-scale operations.
- 6. Cost-Effective and Environmentally Friendly:** The PureBLAST Nano is cost-effective and environmentally friendly, as it uses no chemicals and generates no waste, reducing costs and protecting the environment.

## PureBLAST Mini

The PureBLAST Mini is the ideal choice for those companies, who would like to have the opportunity to clean small parts and surfaces, without having the usual constraint for a high air flow compressor. Daily maintenance on processing equipment and electronics or the occasional cleaning of parts is easily carried out with the PureBLAST Mini.

### Air requirements

One of the most important benefits of the PureBLAST Mini (besides price) is that it is designed to function using plant air supply. Most factories only have compressors that generate 7 bar and an air volume of 1000 to 3000 liter/min available which for most cleaning jobs with the PureBLAST Mini should be sufficient to achieve the desired result.



### Almost no noise

Being able to dry ice blast in an area where other people are working can be done with an PureBLAST Mini. Operating at sound levels as low as 75 dB makes it possible to work even without hearing protection.

# Accessories for PureBLAST Nano & PureBLAST Mini

## Short nozzles

The most frequently used nozzle is the short nozzle. This tool is particularly useful because it allows easier access to areas that are often difficult to reach. Its compact design makes it easy to manoeuvre in tight spaces and reach areas that would be difficult to reach with longer or bulky nozzles.



## Curved nozzles

When it comes to cleaning machinery with small openings, it is sometimes necessary to use a curved nozzle for effective cleaning. In particular, a nozzle with a 45-degree angle is especially useful in these cases, as its design allows more convenient and efficient access to hard-to-reach areas. This angled nozzle facilitates cleaning in confined spaces, ensuring that all corners and components are reached and maintained in optimum condition.



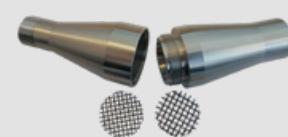
## Wide nozzles

The wide nozzle provides a more gentle cleaning and covers a larger area thanks to its 25 mm orifice. If you are looking for an even gentler cleaning, you can use it in combination with the crusher, achieving optimal results without damaging the surface. It is especially used for cleaning wood, textiles and electrical panels, among others.



## Crusher

For thorough cleaning, a crusher machine can be used to break up the dry ice into finer fragments. The method is that the dry ice passes through a mesh plate. These mesh plates are equipped with different sized holes, which allows the size of the 'crushed' particles to be adjusted and provides different levels of impact, thus adapting to different cleaning intensities.



## Nozzle holder

We have a variety of storage systems designed to ensure that all items are properly organised. This not only makes it easier to access accessories when they are needed, but also helps prevent their loss.



The leaflet only shows some accessories, full list: [www.dryicen.com](http://www.dryicen.com)

## PureBLAST 2500

The PureBLAST 2500 has got ¾" Festo air components which will be suitable for almost all types of cleaning applications. Weight and size is smaller than the PureBLAST 3000 and more powerful than the PureBLAST Mini. The perfect choice for factory air cleaning 3000 -7000 ltr/min and at 5-7 bar.



## PureBLAST 3000

The PureBLAST 3000 was developed in close co-operation with a customer, who had specific needs for operating a dry ice blaster in an environment with many challenges. Size and simplicity combined with strength and durability were the key facts. With an overall width of only 400 mm the machine can easily be moved in and around in narrow spaces and especially in between machines in the production. This enables the operator to get closer to the point of cleaning and thereby being able to work with shorter length of blast hoses, which again gives a better cleaning result. Being narrower does not mean a smaller dry ice hopper. The PureBLAST 3000 holds more than 25 kgs of dry ice, which for most applications is more than 30 minutes operation before refilling.

## Simplicity and robustness

Operating and moving equipment around in tight spaces also means a risk of damage to the machine. That is why we have designed the operation of the equipment with components that are not sticking far out (risk of breaking of) and at the same time all components are placed protected behind the handles at the back of the machine.



## Nozzle selection

It is not always necessary to have maximum cleaning power/speed. One of the most obvious benefits of dry ice is that it also can clean electronics and sensitive surfaces without damage. However, to obtain the fastest cleaning on surfaces where no damage is possible e.g. steel surfaces, then these factors needs to be maximized.

## Air pressure

The blaster and the hoses are built for pressures up to 16 bar. Higher pressures enable the removal of deposits that have a greater adherence to the surface.

## Air volume

More air equals quicker cleaning. However, if you can work with lower air flow then you save, not only in diesel/electricity consumption, but also in the investment in larger and more expensive compressors.

# Accessories for PureBLAST 2500 & PureBLAST 3000

## Short nozzles

In situation where accessibility to the area which needs to be cleaned is awkward or difficult to reach then a shorter nozzle is the only solution.



## Curved nozzles

Cleaning of machinery with small openings sometimes require a curved nozzle. The 45 degree nozzle makes it easier to access and clean in tight spaces. Curved nozzles can be found both as short or long nozzle.



## Wide nozzles

Selection of wider nozzle offer a far gentler clean whilst also cleaning a greater area. An orifice of 80-90 mm allows an acceptable cleaning effect.



## Long nozzles

To achieve maximum air velocity in high performance nozzles, air and dry ice should be accelerated to 3-5 degrees. Nozzles 600-700 mm long are optimal, being light and easy to handle. The nozzle widens at the orifice, 30-40 mm wide. Other configurations compromise efficiency for more aggressive cleaning.



## Crusher

For gentle cleaning, a crusher is used to break the dry ice into smaller particles through a mesh plate with holes of different sizes, thus adjusting the strength and aggressiveness of the cleaning.



## Holders

Holders that facilitate transport and storage, thus optimizing efficiency.



## Nozzles inserts & Throat diameter

The correct selection of the insert allows the pressure supplied to be maintained (the diameter indicates the required air flow rate): •5/6 mm for low air volume. •7/8 mm for medium air volume. •9/10 mm for a high air volume.



To avoid pressure drop, it is essential to adjust the flow through the nozzle. The PureBLAST 2500/PureBLAST 3000 has an interchangeable insert system that simplifies this adjustment and allows different diameters to be used with a single nozzle, offering a more economical solution.





Dry ice is the solid form of CO<sub>2</sub>, which is well known and often used in the food industry. It is completely waterless and eliminate the need for use of chemicals. We offer dry ice blasting solutions both for larger industries with a daily use to smaller machines with low air consumption for scheduled cleaning.



## Food processing

Cleaning with dry ice of food processing equipment has widely been accepted as an effective and environmental friendly method to remove grease, grime, leftover food, caked-on dust, flour, oil, baked-on carbon, yeast etc. And also important.

- Reduction in labor cost = lower OpEx
- Reduces wear on tooling and give longer lifetime of machines = lower CapEx
- Reduced use of chemicals = better environment

Equipment and parts can be cleaned while in operation.

This 100% cleaning will prevent bacteria growth – even in hard-to-reach areas like.

- Conveyors
- Switches
- Slicers

- Packaging lines
- Panels
- Mixers

- Motors
- Ovens



All automated equipment benefits from a “NO CONTACT CLEANING SYSTEM”.

Lightweight materials used to manufacture Gun Heads, Grippers, and Tooling Stations are damaged by traditional methods of Slag and Debris removal. Dry Ice provides for the removal of problem causing contaminants without damage to the equipment.

Dry Ice Cleaning eliminates scraping, chiseling, hammering, and the use of toxic chemical cleaners.

Efficiency is increased due to Grippers, Welding guns, locating pins and tooling stations working as if new, also as and when break downs occur, engineers can isolate and repair defective equipment quickly without having to remove difficult weld slag.



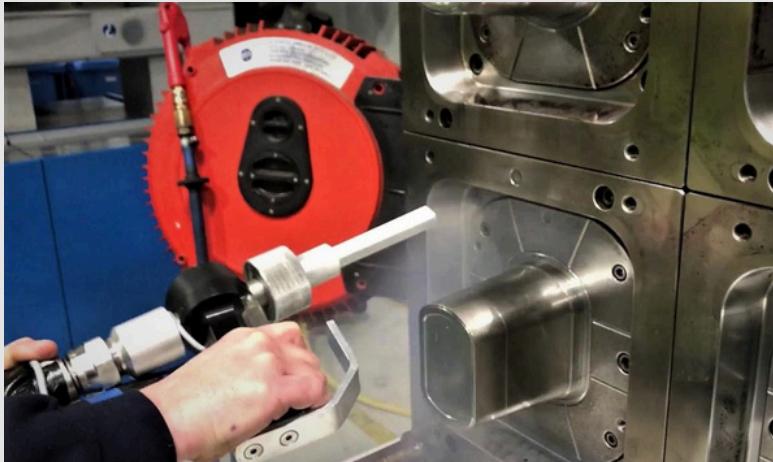
## Welding cells and robot cleaning

Critical process cleaning to automotive manufacturing industry.

Regular maintenance of automated production equipment increases the volume and quality required from manufacturing industries. To that end, it is essential that a bespoke integrated cleaning and preventative maintenance program is in place and monitored, to extend the life and service of your assets. Difficult contaminants produced during production could be, but are not limited to, Grease, Carbon, Weld slag, Weld spatter, Resin, Glue and chemicals. All of the above, if not regularly removed, will build up in and around automated equipment damaging wrist axis joints, clamps and grippers, locating pins and part present sensors and when the equipment fails your very expensive technician will have to remove the build up of slag/dirt before any repair work can be completed. (extended equipment down time).



Regular cleaning reduces the time needed for each cleaning operation and more important reduces the rejects to a minimum. No dust, water or chemicals used to achieve superior finish and quality.

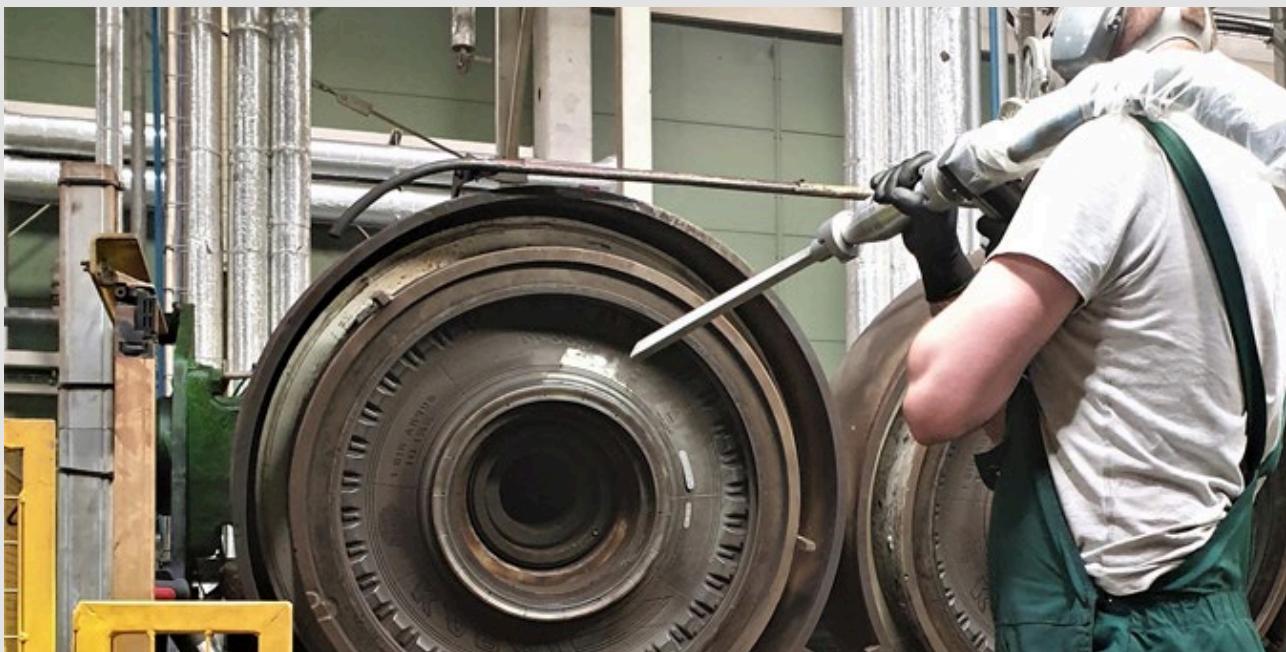


## Plastic injection industries

Cleaning with dry ice of molds, screws, mixers ect. in plastic and styropor injection industries can benefit from dry ice cleaning, which gives advantages such as:

- Reduction in labor cost
- Reduces wear on tooling
- Decreases scrap rates
- In situ on site cleaning without having to remove the molds from the plastic injection molding machine.

Cleaning when hot is an advantage to the cleaning with dry ice. Quick return of equipment back into production. No need to cool down and reheat. What could normally take hours can be done in minutes. Removing of antislip material, grease and residues from production material without any damage to the mold or equipment.



## Tire mold cleaning

In site on site cleaning without having to remove the molds. Cleaning when hot is an advantage to the cleaning with dry ice. Quick return of equipment back into production. No need to cool down and reheat. What normally could take hours can be done in minutes.

- Cleaning while hot - Less down-time
- In-situ cleaning - Less down-time
- 100% Clean - Less rejects
- Environmentally friendly - No chemicals
- Reduces labor cost - safe to use - No secondary waste

With a high investment cost of each tire making mold, a long life is a must. Dry ice blasting has for the last 30 years been the preferred cleaning methods for tire molds because it is fast, efficient, dry and absolutely without any damage to the valuable mold. The impact speed and expansion of CO<sub>2</sub> on impact makes it possible to clean the important vent holes in molds.



Dry Ice Blasting removes the matter that can promote mould growth along with removing existing mould by using dry ice pellets - 78 °C freezing temperatures.

Successful restoration of contaminated materials for industries like residential building, construction and processing plants and will save time and money without the need for disassembly. Reducing secondary waste clean up and restoring rather than replacing materials.



## Mold remediation

Mould and Bacteria can cause a great amount of health issues when found in everyday living and working spaces. Common causes and habitats for mould growth include floods, leaks, plumbing problems, elevated humidity, and inefficient cleaning. Allergies are on the rise, fungal infections have become common and contamination has become a risk in production facilities, restaurant kitchens and product and food storage facilities. You are benefitting from Dry Ice Blasting, because:

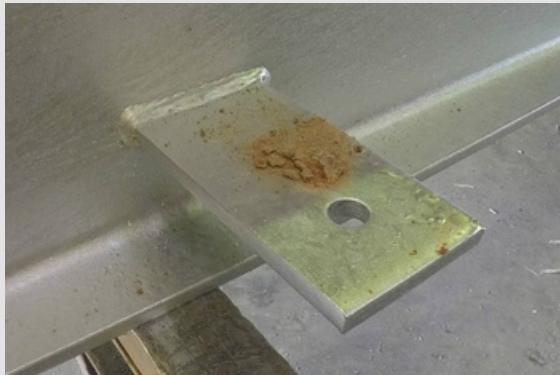
- 60% to 80% faster job completion
- Safer, cleaner, easier and faster
- Thorough mold spore removable
- Superior detail cleaning in tight spots and around obstructions
- Complete removal of mold from tight angles in trusses, joists and corners
- Enables cleaning around wiring and plumbing without damage
- Easy clean-up, with reduced waste disposal
- Surface left completely dry, contaminant free and structurally intact.





Removal of spots with zinc ashes is done in seconds without any damage to the surface. We supply mobile units that can be used at multiple locations, where standard compressed air plugs are located.

No water or chemicals used to get superior finish and quality.



## Zink ash removal

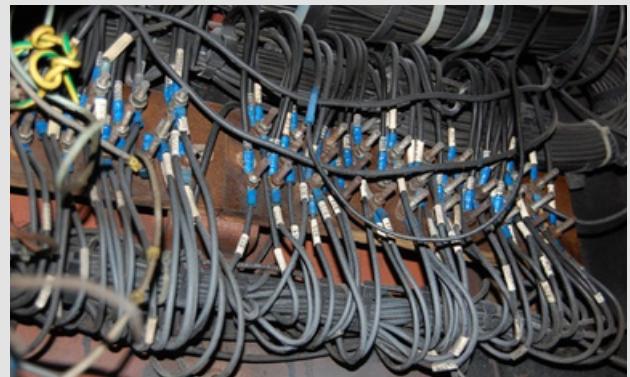
Removing of zinc ash from hot dip galvanization

- Reduction in labour cost.
- Reduces aftertreatment issues.
- Avoid scratching from tools.

Dry ice blasting offers a completely dry and non damaging cleaning process.

- Quickly remove of zinc ashes and other unwanted particles.
- Can be cleaned while surface is hot.
- No water spill in production area.
- Quick turnaround.
- Perfect result can be achieved with only little air supply.

An essential part of the smooth operation of a railway is a well-maintained system and technology. This involves regular inspections, upgrading equipment and ensuring that each component is operating efficiently to avoid disruption and ensure the safety of passengers and staff.



## Transport

Cleaning electrical control panels, air-conditioning/heating system, seats etc. with dry ice offers many advantages such as:

- Reducing risk of short cuts and break-downs.
- Reduces risk of damage to components.
- Cleaning of electrical control systems
- Quick pre-clean before inspections.
- Cleaning of Air conditioning / heating systems.
- Cleaning of springs and shock absorbers.
- Cleaning of brakes and undercarriage
- Improve air quality in trains, buses, airplanes

etc.

Cleaning of exhaust hoods and exhaust fans to reduce risk of fire.





## Shoe-mold cleaning

Protecting and securing long life of a mold is key to all manufactures. Using dry ice blasting the regular cleaning of shoe molds provide the perfect asset management and thereby reducing cap-ex. Molds for any kind of shoes or boots require a perfectly cleaned mold to secure achieve the highest quality of performance and appearance.

Dry ice blasting enables a dry and dustless cleaning without having to remove the mold from the process line.

A gentle and non-abrasive removal of deposits on the mold secures a long life of the mold and thereby reduces capital expenditures cost for new process equipment. The reduction in use of chemicals or other harmful processes can be replaced with the environmental friendly dry ice blasting solution.



The use of dry ice blasting after a fire has many advantages. This technique allows the removal of soot, charred residues and odors without damaging the affected surfaces. In addition, it does not use aggressive chemicals, making it safe for the environment and for the operators who apply it.



- Avoids the mess of soda or sand blasting, providing a cleaner and more efficient cleaning process.
- It does not use hazardous chemicals, making the process safer.
- Reduces the smell of burning from the fire, improving air quality in the affected area and facilitating restoration.
- Eliminates secondary residues, speeding up the clean-up process and reducing downtime.
- Does not cause additional water damage, making it ideal for moisture-sensitive surfaces and equipment.
- It is safe for cleaning electrical components, ensuring there is no risk of short circuits or damage to machinery.



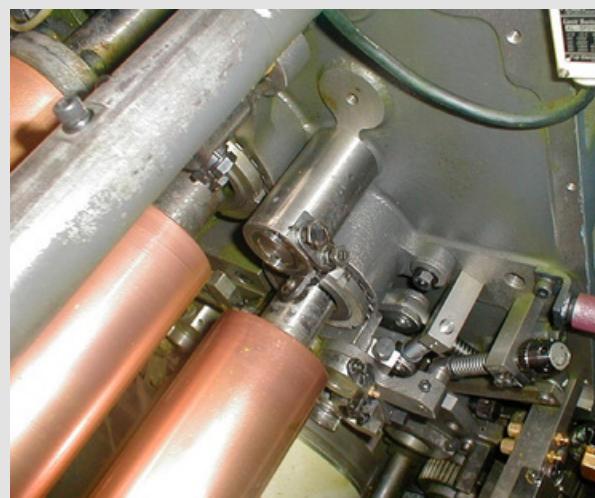
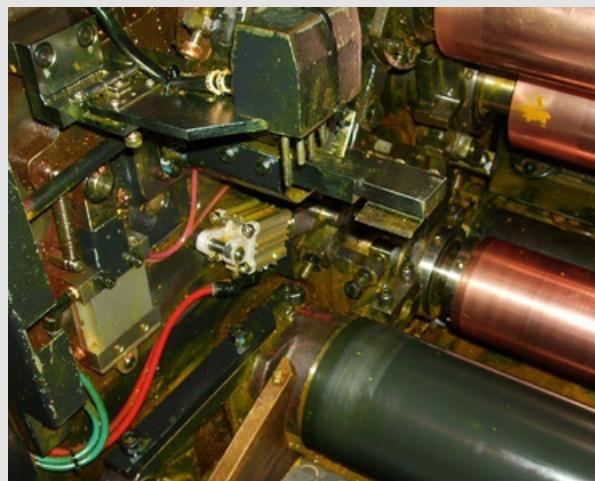
## Fire restoration

Dry ice, or carbon dioxide in solid form, is an innovative solution for cleaning sensitive parts without adding water or chemicals that can damage them. By using crushed pellets at low pressure, delicate electronic components can be safely cleaned.

This method also prevents corrosion by removing chlorides present in the smoke, thus protecting both external and internal metal parts. In addition, dry ice is effective in reducing burning odours, improving the environment in industrial environments.

The versatility of dry ice allows the cleaning pressure to be adjusted as required: gentle for delicate parts or more aggressive to remove carbonised surfaces. This ensures effective cleaning of equipment such as wiring, electrical panels and motors, without leaving residue or causing damage.

In short, dry ice is an effective and safe option for the maintenance of sensitive equipment, combining thorough cleaning and material protection.



## Printing industry

High accuracy is required to achieve top quality print results. With increased printing speed and frequent job changes, the printing equipment must always be in top condition.

Dry ice cleaning is suitable for offset, flexo, and gravure printing equipment.

Dry Ice blasting is an environmentally correct solution using no solvents or chemicals.

Dry Ice Blasting... the printer's choice due to:

- No damages to air lines, pneumatic hoses, sealed bearings, plastic casings, oil lines, motors, control panels, control circuits and cabinets. No damages to gears or grippers.
- In-situ cleaning thereby reducing press downtime.
- Ideal for cleaning of powder spray and UV coating build-ups.



## Wood processing

Dry ice cleaning of:

- Cutting components
- Main production line
- Electrical motors
- Cladded walls
- Main Saw line
- Hydraulic room with pipe work
- Steel beams
- Ventilation fans

Dry ice removes deposits on motors and components, reducing the risk of overheating, failure and fire hazards. It also makes it easier to clean pipes and trays without damaging them, and improves the efficiency of fans by removing dirt.

Dry ice is ideal for the removing of compressed saw dust and sap from the timber cutting process.

- No damage to painted areas.
- No water, chemicals or secondary waste.
- Easy to pass site audits after thorough dry ice blasting.

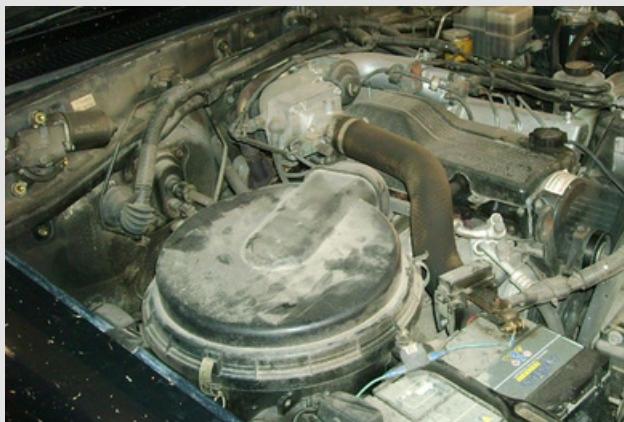


## Robotic lawn mowers

Robotic lawnmowers have evolved significantly in recent years, incorporating advanced technology that allows them to offer optimal performance in garden care. However, this increased sophistication also means greater sensitivity to factors such as water and moisture, which can affect the performance of their electronic components. To keep these robots in perfect condition and prolong their service life, proper cleaning is essential. In this context, dry ice blasting presents itself as an innovative and effective solution.

You are benefitting from Dry Ice Blasting, because:

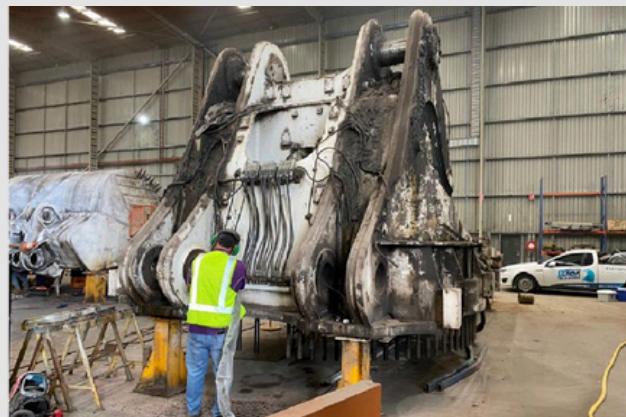
- No damage to sensors, parts or surfaces is also one of the superior benefits.
- Quick return to operation – no need to dismantle before cleaning.
- Low capital investment cost.
- Our PureBLAST Mini can easily carry out this cleaning at low to medium airflow.



## Car cleaning

Dry ice is a milestone in maintenance of cars. It is not only a very green way of cleaning both interior and exterior but also a perfect solution for keeping the area where you are cleaning both dry and clean. No need for blasting cabins. No secondary waste that can get into corners, bolts and other components. No water that can cause rust or mess around the workshop. And no chemicals/solvents to make sure you have a safe and green workplace. If you are concerned about your classic, vintage or restored car then dry ice is the solution.

By controlling and regulating the pressure on a dry ice blaster then you can do anything from soft cleaning of textiles and all the way up to paint stripping. At Dryicen we have also designed and manufacture smaller affordable machines that are ideal for smaller compressors. And even with a small dry ice blaster then most objectives can be achieved.



## Mining

Dry ice blasting is revolutionizing maintenance in the mining industry, both in surface and underground operations, and on heavy machinery. This efficient method removes dust, grease and debris without disassembling equipment, improving efficiency and reducing downtime.

In surface mining, it is used to clean conveyor belts, crushers, cooling systems and heavy machinery, preventing overheating and improving equipment durability. In underground mining, it helps keep ventilation systems, electrical equipment, and structures clean and safe.

In heavy machinery, such as excavators and trucks, dry ice cleans engines, hydraulic systems, and cabs, optimising performance and preventing wear. It is also useful on electrical components such as stators and rotors, where it ensures efficient and safe operation without damaging delicate parts.

In short, dry ice blasting improves safety, extends equipment life, and reduces costs, making mining cleaner and more efficient.



Dry ice (solid form of liquid carbon dioxide) is very well known in the food industry for cooling. It is accepted as an environmentally friendly technology that can replace use of chemicals and the excess use of water.

No moisture = no bacteria/mold

## Bakery

Reasons for Bakeries to decide on dry ice cleaning:

- Process line always dry and ready to produce (NO DOWN TIME).
- Remove labels and glue from conveyors and machines.
- Partial cleaning without shutting down.
- Roof to floor cleaning (lamps, cables etc.) without covering up (DRY).
- Cleaning of machines inside, around bearings, motors, electrical etc...

# Benefits of dry ice production

In house production of high-density dry ice pellet offers many advantages.

- Delivery/production with short notice
- Reduction in losses, by manufacturing only what is needed
- Fresh pellets for better cleaning or cooling



The important factors, when considering purchasing a dry ice pelletizer are, besides the obvious fact that you want lowest capital investment cost, that you get a machine with well-known reliable components, with the minimum of maintenance cost.

Who can benefit from having in house production of dry ice?

- Customers and consumers of dry ice with long transport times and distances to supplier.
- Customers who require short response time from ordering to use.
- Customers where the pay back calculation shows significant savings.

## Pelletizer SLJ

Making dry ice on site also reduces the need for dry ice containers used for transport from supplier to point of use thus eliminating the risk of bacteria or other unwanted elements entering food-safe areas. With a weight of only 65 kilos and the size of only 90 X 32 X 50 then the SLJ pelletizer can be installed practically everywhere where the dry ice is needed. Feeding directly into a blaster or at point of use for shipping reduces handling time and again reduces the sublimation during normal storage and delivery from supplier.

Revolutionary and patented mechanical dry ice pelletizer with 8 pistons and a closed lubrication system makes the SLJ pelletizer a small yet powerful dry ice production unit with a minimum need for maintenance. A capacity of 40 kg/hour will cover the demand of smaller dry ice blasting companies, catering companies, laboratories etc. who would benefit from in-house production.

Huge savings on transport and evenly important the availability of the dry ice when and where it is needed. Making dry ice the minute it is needed can easily save 30-40% because the dry ice is not subjected to melting/sublimation. And by only making the kilos needed then users will see a tremendous reduction in waste as most who are having dry ice delivered will tend to purchase more than they would use.

Dry ice pellet size:

The most common dry ice pellet size for dry ice blasting is 3 mm, although 2.2 mm and 1.7 mm sizes are also available.



## Pelletizers DIP120 & DIP240

With an output of 120 kg or 240 kg per hour the DIP120 and DIP240 will cover the needs of most stand alone, in-house production of dry ice for cleaning or cooling.

Smart engineering with internal tubing for the flow of the liquid carbon dioxide not only reduces production cost, which in return benefits our customers, but also increases the efficiency and make it possible to have a start up of dry ice pellet production in less than 20 seconds.



The stainless-steel cabinet is designed so that it easily can be moved around with a fork-lift, which facilitates regular, easy cleaning around and under the machine. Larger removable panels gives clear & spacious access to all components inside the pelletizer and makes routine maintenance time and cost efficient.

The small build size (110x70 cm) takes up very little floor space and with the delivery pipes extended out in the front of the unit allows for a dry ice box to be centered under the pelletizer to allow an even production without having to shuffle dry ice from one end to the other.



The pelletizer is operated by the touch panel that also allows for individual settings to optimize production capacity. An input/output menu allows for a complete system check with a functionality check of each valve and components in the machine.

Besides a durable 100% stainless steel cabinet, we only use components from Danfoss, Siemens and a high-performance hydraulic power unit are key components for the operation of the Dryicen pelletizers.

When manufacturing dry ice the conversion of liquid CO<sub>2</sub> to dry ice is about 2,5 kg of liquid CO<sub>2</sub> to make 1 kg of dry ice.

The special design for supplying liquid CO<sub>2</sub> to our press chamber, brings the conversion closer to 2,2. That of course also requires that the installation of the LCO<sub>2</sub> tank and supply piping from the tank to the pelletizer is done according to our guidelines.

It is important to stress that NO CO<sub>2</sub> is specifically produced to manufacture dry ice. The CO<sub>2</sub> used for dry ice production comes as a bi-product from other process like ethanol, biomass, ammonia or even from natural sources such as underground volcanos. This makes dry ice the true environmentally green solution for transport, cooling and cleaning.

## Production cost calculation

Production cost calculation can be found on  
[www.dryicen.com](http://www.dryicen.com)

# Technical data and specifications



MODEL	SLJ	DIP 120	DIP 240
Production capacity *16-18 bar	40 kg/hour	120 kg/hour	240 kg/hour
Standard extrudingplate	1,7 mm 2,2 mm 3 mm	3 mm 8 mm 16 mm	3 mm 8 mm 16 mm
Voltage (16Amp)	110 V - 60 kHz 230V - 50 kHz	400 V - 50 KHz	400 V - 50 kHz
Power consumption	2,2 kW	5,5 kW	5,5 kW
Dimensions L x W x H	90 x 32 x 50 cm	110 x 70 x 170 cm	110 x 70 x 170 cm
Weight	65 kg	450 kg empty	500 kg empty

The pelletizer can operate with LCO<sub>2</sub> tank pressure from 13 to 23 bar. The piping from tank to pelletizer must be cryogenic insulated piping, so a minimal distance from tank to pelletizer is ideal.

## Customized solutions

Another suitable application for the use of a pelletizer is when there is a need for automated production and filling of dry ice to one or more dry ice blasters.

By using industrial output weight control cells linked to our control system the production of dry ice can be done directly to a blaster or via a feeding container.

Blasters can be connected to a robotic solution or with fixed blast nozzle.





# We offer a solution to every surface!

## How Does Dry Ice Blasting Clean?

Dry Ice Pellets are propelled at a supersonic speed by compressed air. Upon impact, the dry ice creates a micro-thermal shock (caused by the extreme cold temperature of -79°C) which breaks the bond between the coating and the substrate. The high pressure air stream removes the dirt from the surface, while the Dry Ice Pellets vaporize (sublimate) before your eyes.

## A Greener Clean

Dry Ice Blasting is quickly becoming favored among all industries because of environmental and production processes, standards, and certifications along with a growing consciousness of the environmental impact of production practices. This method of natural cleaning uses pellets made through a process of taking Liquid Carbon Dioxide (CO<sub>2</sub>) and expanding it to produce a snowlike substance, that is compressed through a die to make hard Dry Ice Pellets. Environmental benefits include cleaning with a natural substance, replaces chemicals and minimizes the need for specialty waste disposal.

## Our technology has many benefits

### 1. Cleaning with a Natural Substance:

Dry Ice Blasting uses Dry Ice Pellets made from the same substance used to carbonate beverages. This method does not generate secondary waste as does sand, soda, water, or grit cleaning. Dry Ice Blasting also replaces chemical and solvent based cleaning.

### 2. Safe on Electrical:

This versatile process cleans heavy buildup without damage to sensitive areas like electrical components, switches, wiring, photo electric sensors, and more.

### 3. No Damage:

Dry Ice Blasting is completely dry, non-abrasive, non-toxic and non-corrosive. It quickly removes most contaminants without damage to switches, panels, lines, tubes, wiring or belts, HVAC equipment and is safe to use on electrical.

### 4. No Down Time:

The process is very fast and dry. The dry ice disappears on contact and can be performed on-line without disassembly and without need for drying time.



## Dryicen United States

Innovators developing cryogenic and dry ice cleaning technologies since 1986. Cleaner, faster, greener.

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