



catalogue

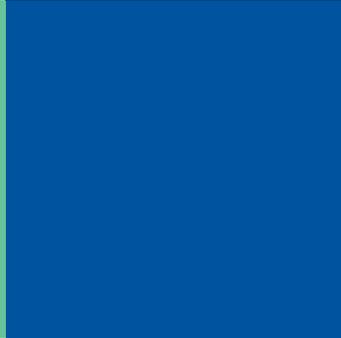
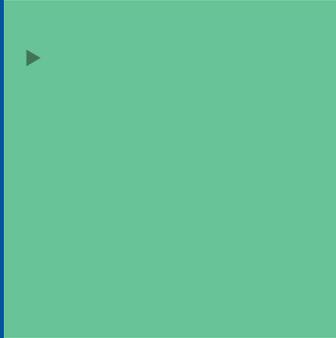
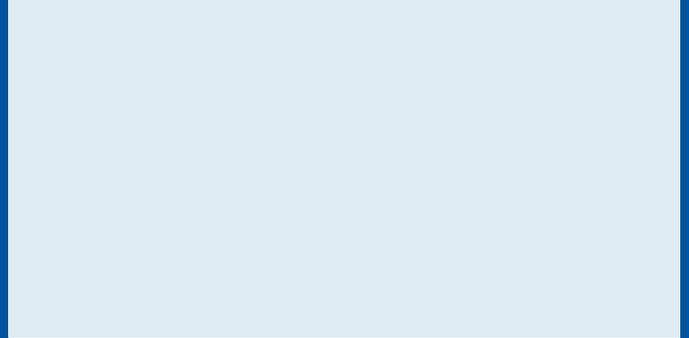
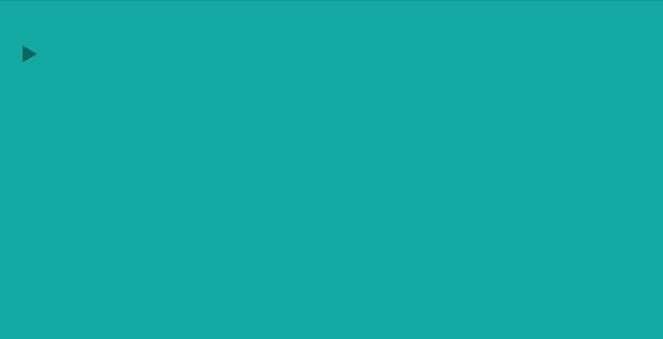
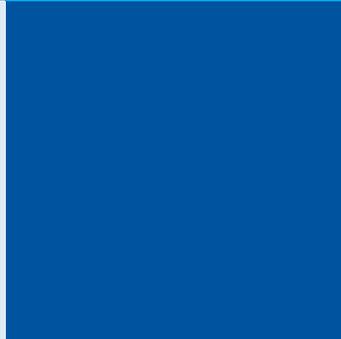
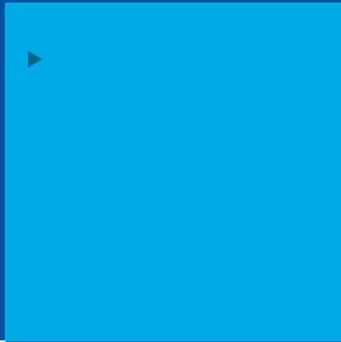
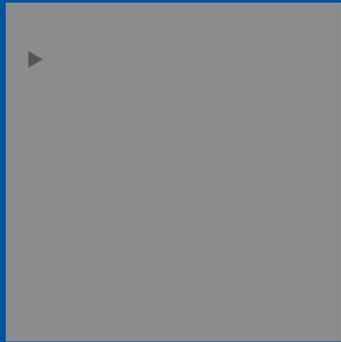
The Cool Way of Cleaning



**Cleaning solutions
through dry ice blasting**



For optimal performance,
use Acrobat Reader.
Download it [here](#)



About us

ARTIMPEX N.V. develops and manufactures patented Dry Ice Cleaning & Production Equipment called CRYONOMIC®, a registered trademark, since 25 years.

The company is renowned for in-house R&D, supplying customers with quality performance equipment at competitive prices.

Sales is organised through certified partners. These partners are distributors or agents and are experienced professionals who advise, demonstrate and provide after sales service.

With a world-wide team of 60 persons we'll be happy to introduce our cleaning or dry ice production solutions to your company!

Our services

- › Worldwide assistance through certified agents
- › Worldwide contract cleaner network
- › Preliminary study & feasibility analysis
- › Test cleaning
- › Determination of system configuration for your application
- › Sales of dry ice blasters and pelletisers
- › Start up assistance & staff training
- › Integration into production
- › Delivery of dry ice or production on site
- › Automation





What is dry ice?

Dry ice is frozen carbon dioxide (CO_2), a normal part of our earth's atmosphere. It is the gas that we exhale during breathing and the gas that plants use in photosynthesis. It is also the same gas commonly added to water to make soda water. This gas is captured during industrial processes and recycled to make dry ice.

Applications

- › Dry ice blasting
- › Cooled storage and transport (hospitals and laboratories)
- › Technical applications: e.g. removing explosive gases from tanks for maintenance purposes, declamping metal parts etc.
- › Cooling process in automation
- › Winemaking
- › Airline catering
- › Special effects (smoke)
- › Fundamental and applied research



inline machine cleaning

Principle of dry ice blasting

Dry Ice Cleaning is a blasting technique similar to sand blasting, but makes use of solid CO₂ or dry ice pellets. On impact the pellets vaporize to carbon dioxide gas and increase in volume by a factor of 700. Due to this expansion the **contaminant is lifted** and separated from the base material.

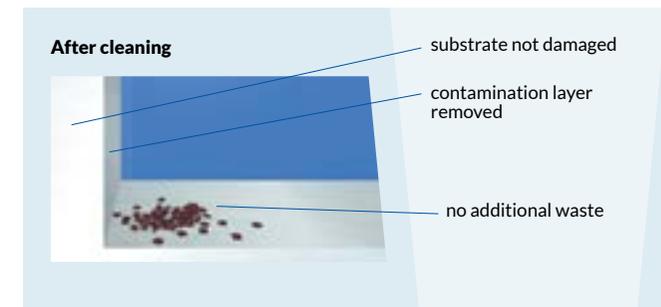
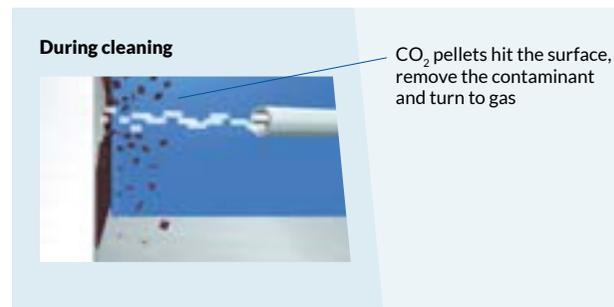
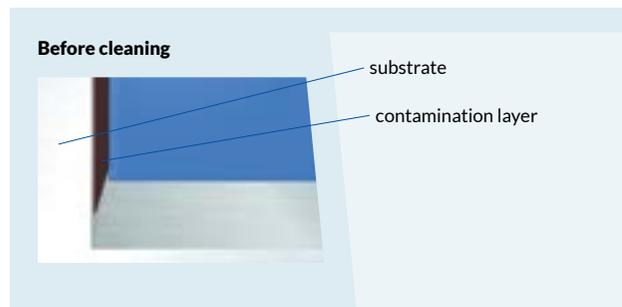
The advantage of using dry ice pellets as blasting material is twofold:

1. Thermal shock

The very low temperature of the dry ice pellets (-78°C or -109°F) causes the contamination to freeze and contract resulting in the **easy detachment** of the contaminant from the substrate.

2. Explosion lifting force

The dry ice pellets vaporize to carbon dioxide gas on impact, which means that only the original contaminant is left for disposal. This **natural evaporation of dry ice pellets** is a major advantage of the dry ice cleaning method.



Supply process of dry ice



Principle of dry ice blasting

Comparison between CRYONOMIC® dry ice cleaning and traditional cleaning methods:

	CRYONOMIC®	Sand blasting	Solvent cleaning	High pressure	Manual cleaning
• Time saving:					
Cleaning in the production environment	✓	○	⊙	○	⊙
No need to strip down the production machines	✓	○	○	○	○
Short or no production stop	✓	○	⊙	○	⊙
Fast cleaning method	✓	✓	○	✓	○
• Environmentally friendly:					
Generates no additional waste	✓	○	○	○	○
No use of aggressive or dangerous products	✓	○	○	○	⊙
No noise nuisance	○	○	✓	○	○
• Other advantages:					
Leaves the substrate intact	✓	○	⊙	⊙	○
Suitable in food industry	✓	○	○	✓	⊙
Pellets do not conduct electricity	✓	○	○	○	⊙

- ✓ Advantage applicable for this technique
- ⊙ Advantage sometimes applicable for this technique
- Advantage not applicable for this technique

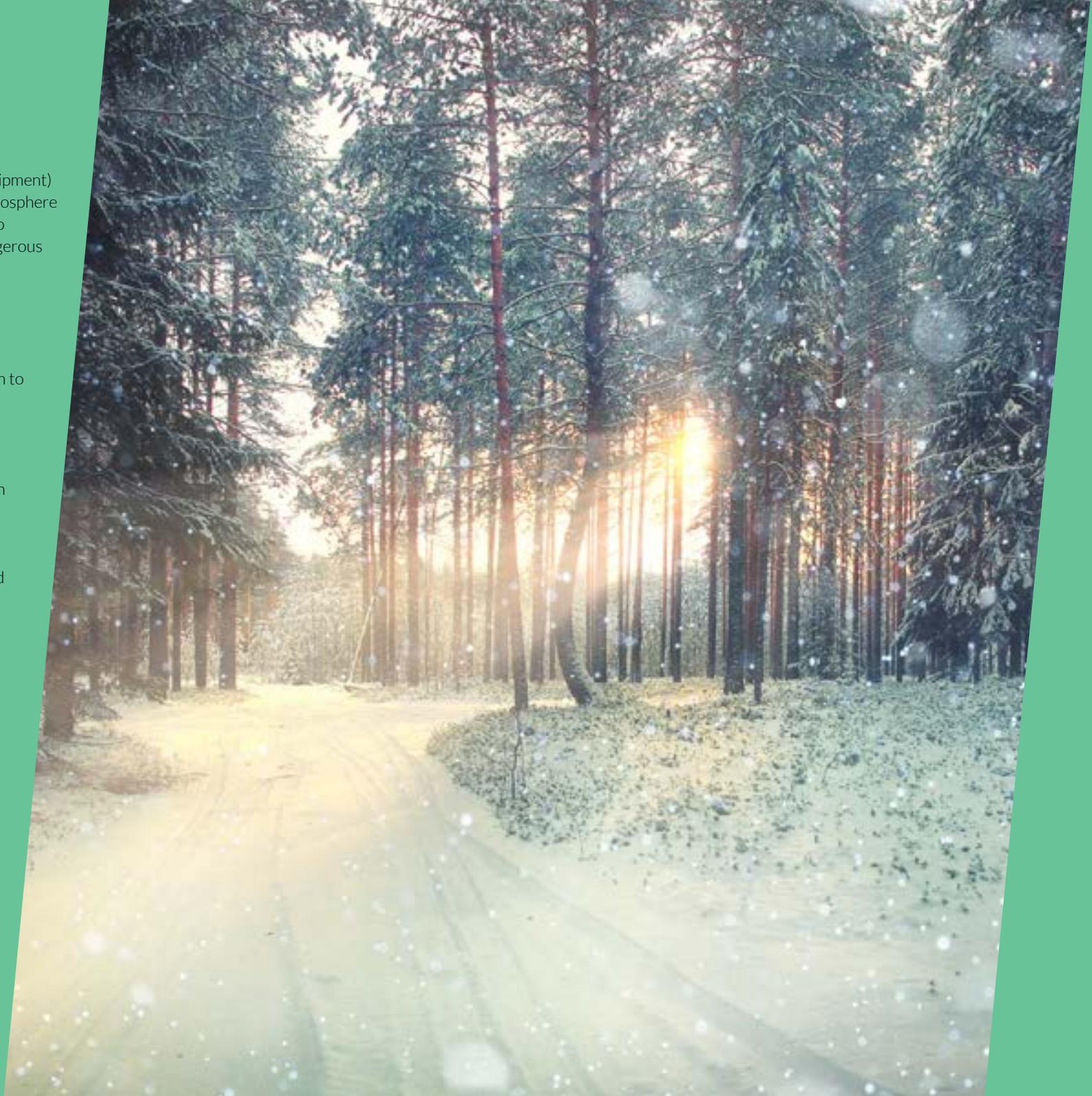
Environmental

Environmental facts about dry ice blasting:

- › Does not generate secondary waste
- › Safe and non-toxic (e.g. food processing equipment)
- › Does not release harmful gases into the atmosphere
- › Reduces or eliminates employee exposure to (and corporate liability from) the use of dangerous chemical cleaning agents

Other cleaning methods can be toxic:

- › Sand, soda, or water blasting can leave toxic secondary waste to be cleaned up in addition to the toxic substrate
- › Sand, soda, or water blasting can create downstream contamination that effects surrounding installations
- › Soda blasting can kill surrounding vegetation
- › Chemical and solvent cleaning methods are toxic, creating toxic waste to be disposed of
- › Workers are exposed to potentially harmful substances through the use of chemicals and solvents



Dry ice blasters

1-hose dry ice blasters

- › COB 62
- › COB 62+
- › COB 71
- › COB 71R

1 + 2-hose dry ice blasters

- › COMBI 71
- › COMBI 71R
- › COMBI 72
- › COMBI 72R
- › COMBI 73
- › COMBI 73R



How to choose your CRYONOMIC® dry ice blaster?

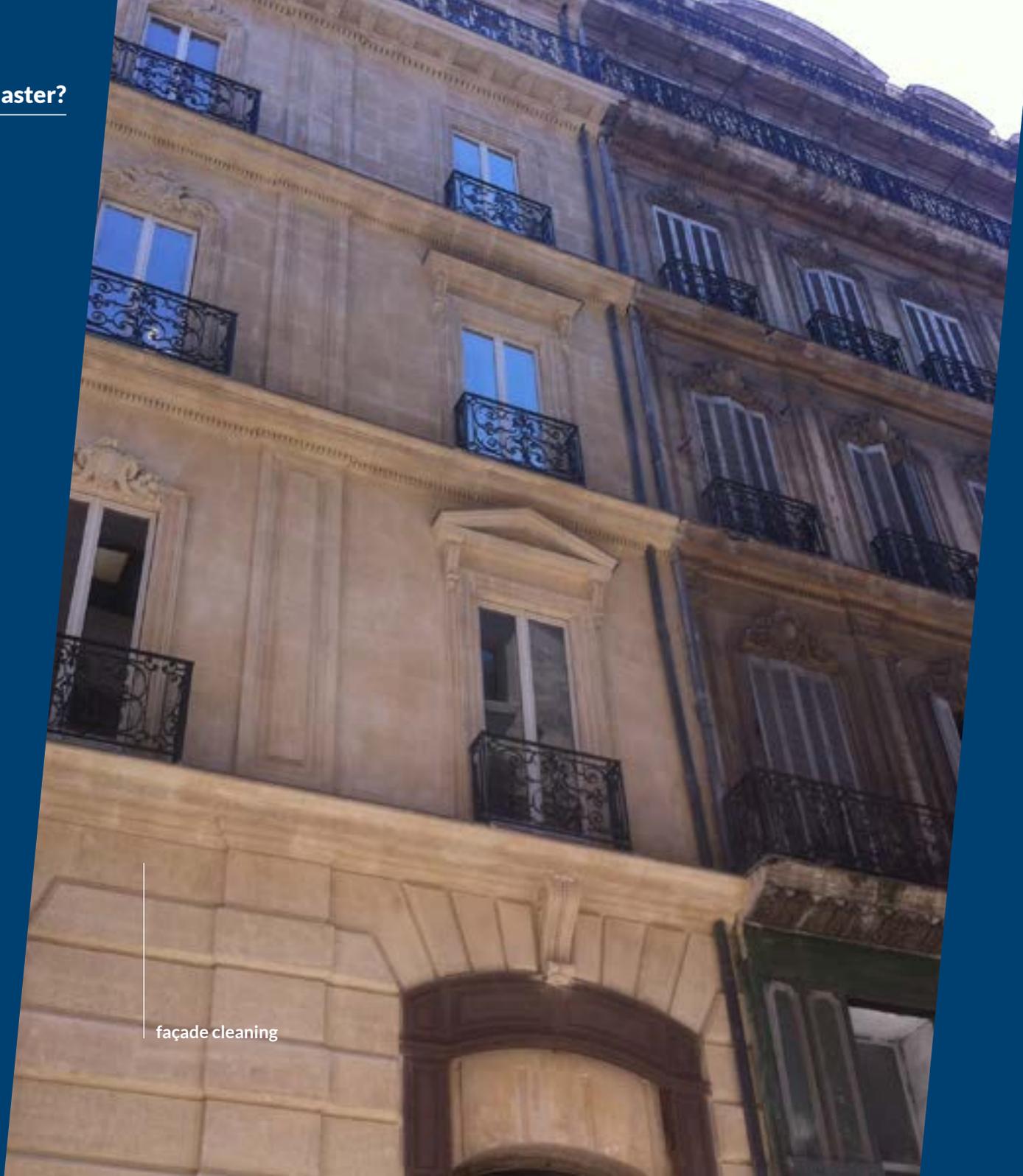
One-hose vs two-hose dry ice blasters

When to use 1-hose system?

- + Smaller jobs
 - + More focused cleaning
 - + **Mostly end-users**
 - + **Light weight & compact machine**
 - + Ergonomical
 - + Less air consumption
 - + Low budget
 - + Smaller compressor
-
- Uses more dry ice at high pressure
 - Mainly focused on in-house blasting
 - Limited hose length (max 25m)

When to use 1-hose + 2-hose system?

- + Bigger jobs / large projects (m²)
 - + More aggressive cleaning power (up to 16 bar)
 - + Faster cleaning (higher impact + wider nozzles)
 - + Pellets stay intact, and flow and at higher speed
 - + **Contract cleaners & end-users**
 - + **Long distance blasting (up to 100m)**
 - + **Vertical cleaning up to 30m high**
 - + Less dry ice consumption
-
- Enough compressed air required
 - Heavy and less ergonomic
 - Mainly focused on outdoor blasting
 - Bigger compressor needed



façade cleaning



maintenance

1-hose dry ice blaster

COB 62

Maximal performance for repetitive cleaning jobs!

The CRYONOMIC® COB series is a single hose dry ice blaster, transporting dry ice and compressed air in one hose. Its unique concept results in low air consumption and powerful cleaning performance. Its ergonomic design makes it light and easy to manipulate.

Typical applications: maintenance, mould cleaning, foundry, deburring, printing machines, food industry, electrical components cleaning, glue removal, ...

CHARACTERISTICS	COB 62 art. n° P20400
Chassis	<ul style="list-style-type: none">• 2 fixed wheels, 2 pivoting wheels• Push handle and hose support
Dimensions (l x w x h)	380 x 570 x 890 mm (incl. fixed handle)
Weight	66 kg
Hopper	<ul style="list-style-type: none">• 14 kg dry ice capacity• Isolated hopper easily removable
Pellet consumption	<ul style="list-style-type: none">• Adjustable 20 - 80 kg/h• Blasting without dry ice possible
Blast pressure	1-7 bar
Remote control	No
Air consumption	0,5-4 m³/min for 1-7 bar
Pre-equipped for blasting dry ice with abrasives	No



Intuitive control panel: emergency stop and ON/OFF buttons, robust single touch control buttons, blast pressure regulator and manometer

Fast and easy connections: quick coupling, compressed air inlet, ...

DID YOU KNOW?

The COB series dry ice blasters are standard delivered with:

- › Ergonomic blast gun MG1004(R)
- › Hose set consisting of:
 - heavy duty blast hose with quick coupling and stainless steel earthing
 - control cable (for start/stop, gun light ON/OFF)
 - protecting sleeve
- › Dry ice or air-only blasting option
- › Hour counter
- › Safe soft start
- › Start safety protocol



paint stripping

1-hose dry ice blaster

COB 62+

Light weight machine with grit blasting possibilities!

The CRYONOMIC® COB 62+ takes the best of both worlds, combining a manoeuvrable single hose dry ice blaster with the possibility of adding the CRYONOMIC® Abrasive module to perform dry ice grit blasting cleaning possibilities.

Typical applications: façade cleaning, paint stripping, car cleaning, rust removal, machine maintenance, grit blasting, ...

CHARACTERISTICS	COB 62+ art. n° P20500
Chassis	<ul style="list-style-type: none">• 2 fixed wheels, 2 pivoting wheels• Push handle and hose support
Dimensions (l x w x h)	380 x 570 x 890 mm (incl. fixed handle)
Weight	68 kg
Hopper	<ul style="list-style-type: none">• 14 kg dry ice capacity• Isolated hopper easily removable
Pellet consumption	<ul style="list-style-type: none">• Adjustable 20 - 80 kg/h• Blasting without dry ice possible
Blast pressure	1-10 bar
Remote control	No
Air consumption	0,5-5,3 m³/min for 1-10 bar
Pre-equipped for blasting dry ice with abrasives	Yes



• Abrasive module:

in addition to the dry ice blaster, this module allows to take advantage of the abrasive action of grit together with the removal action of dry ice



rubber industry

1-hose dry ice blaster

COB 71(R)

Top notch performance with unbeatable efficiency!

The CRYONOMIC® COB 71 is the most robust single hose dry ice blaster of the COB series, having a bigger hopper and more blast pressure. The Remote Control on the COB 71R gun allows you to change blasting conditions (pellet and air consumption) at distance.

Typical applications: construction & renovation, contract cleaning, (Offline) machine maintenance, inline production line cleaning, automotive, rubber, metal processing, (nuclear) decontamination, robotisation, ...



CHARACTERISTICS	COB 71 art. n° P20800	COB 71R art. n° P20850
Chassis	<ul style="list-style-type: none"> • 2 large wheels, 2 pivoting wheels • Foldable push handle and hose support • Lifting eyelets and forklift handling slot 	
Dimensions (l x w x h)	665 x 570 x 876 mm (push handle folded down)	
Weight	90 kg	95 kg
Hopper	<ul style="list-style-type: none"> • 30 kg dry ice capacity • Isolated hopper easily removable • Advanced pneumatic hopper agitation 	
Pellet consumption	<ul style="list-style-type: none"> • Adjustable and displayed: 25-90 kg/h • Blasting without dry ice possible • Start-up value programmable 	
Blast pressure	1-12 bar	1-12 bar
Remote control	No	Yes
Air consumption	0,5-6 m³/min for 1-12 bar	0,5-6 m³/min for 1-12 bar
Pre-equipped for blasting dry ice with abrasives	Yes	Yes

• **Bigger hopper:**
the isolated hopper is easily removable, an advanced pneumatic hopper agitation makes the hopper with a capacity of 30 kg perform optimal



offsite machine cleaning

1-hose + 2-hose dry ice blaster

COMBI 7 Series

The perfect all-round machine for every job!

The CRYONOMIC® COMBI 7 Series is the only dry ice blaster allowing the highest cleaning performance for every imaginable application. Purposely built to withstand the rough circumstances common to industrial sites, this blaster can be used as a single hose as well as a dual hose dry ice blaster to clean every imaginable application.

This blaster can be used in 6 different set-ups, each having specific applications.

Typical applications: contract cleaning, bigger jobs / large project cleaning, vertical cleaning, long distance cleaning, faster and more aggressive cleaning at higher impact, ...



CHARACTERISTICS	COMBI 71(R)	COMBI 72(R)	COMBI 73(R)
Chassis	<ul style="list-style-type: none"> • Complete stainless steel • Foldable push handle and hose support • 2 big wheels, 2 pivoting wheels • Lifting eyelets & forklift handling slot 		
Dimensions (l x w x h)	665 x 570 x 876 mm (push handle folded down)		
Weight	100 kg	100 kg	100 kg
Hopper	<ul style="list-style-type: none"> • 30 kg dry ice capacity • Isolated hopper • Easily removable • Advanced pneumatic hopper agitation 		
Pellet consumption	<ul style="list-style-type: none"> • Adjustable and displayed on front panel: 25-90 kg/h • Start-up value programmable • Blasting without dry ice possible 		
Blast pressure	<ul style="list-style-type: none"> • 1-12 bar with one-hose gun • 1-16 bar with two-hose gun 		
Air consumption	<ul style="list-style-type: none"> • One-hose: 0,5-6 m³/min for 1-12 bar • Two-hose: 1-13 m³/min for 1-16 bar 		

DID YOU KNOW?

A 1 & 2-hose dry ice blaster is perfectly adapted for:

- › Bigger jobs / large projects (m²)
- › More aggressive cleaning power
- › Faster cleaning (higher impact + wider nozzles)
- › Pellets stay intact, and flow and at higher speed
- › Contract cleaners & end-users
- › Long distance blasting (up to 100m)
- › Vertical cleaning up to 30m high
- › Less dry ice consumption



foundry

Compose your CRYONOMIC® COMBI 7 blaster according to your needs

One-hose setup

Medium scale applications
Low air consumption
Focalised cleaning
(R) remote controlled gun

COMBI 71(R)

=



COMBI 7

+



One-hose set

+



MG1004(R)

Two-hose setup

Large scale applications
Low pellet consumption
Long distance cleaning
(R) remote controlled gun

COMBI 72(R)

=



COMBI 7

+



Two-hose set

+



G2001(R)

Both setups

Medium scale applications
Low air consumption
Focalised cleaning
Large scale applications
Low pellet consumption
Long distance cleaning
(R) remote controlled gun

COMBI 73(R)

=



COMBI 7

+



One-hose set and two-hose set

+



MG1004(R) and G2001(R)



mould cleaning

How to choose your CRYONOMIC® dry ice blaster?



CHARACTERISTICS	COB 62 art. P20400	COB 62+ art. P20500	COB 71 art. P20800	COB 71R art. P20850	COMBI 7	COMBI 7R
	1-hose dry ice blaster		1-hose dry ice blaster		1-hose + 2-hose dry ice blaster	
Standard delivered with	<ul style="list-style-type: none"> • MG 1004 gun • Round nozzle Focus 3 <ul style="list-style-type: none"> • 5m hose set • 5m power cord • Manual + CE certificate 		<ul style="list-style-type: none"> • MG 1004(R) gun • Round nozzle Focus 3 <ul style="list-style-type: none"> • 5m hose set • 5m power cord • Manual + CE certificate 		<ul style="list-style-type: none"> • Gun & nozzle: see page 21 <ul style="list-style-type: none"> • Nozzle: see page 21 • Hose set 5m with quick couplings <ul style="list-style-type: none"> • 5m power cord • Manual + CE certificate 	
Hopper (capacity)	14 kg dry ice Isolated hopper easily removable		30 kg dry ice Isolated hopper easily removable Advanced pneumatic hopper agitation		30 kg dry ice Isolated hopper easily removable Advanced pneumatic hopper agitation	
Pellet consumption	Adjustable 20 – 80 kg/h Blasting without dry ice possible		Adjustable and displayed 25 – 90 kg/h Blasting without dry ice possible Start-up value programmable		Adjustable and displayed 25 – 90 kg/h Blasting without dry ice possible Start-up value programmable	
Remote controle	No	No	No	Yes	No	Yes
Dimensions (l x w x h)	380x570x890mm		665x570x876mm		665x570x876mm	
Weight	66 kg	68 kg	90 kg	95 kg	100 kg	100 kg
Chassis	2 fixed wheels, 2 pivoting wheels Push handle and hose support		2 large wheels, 2 pivoting wheels Foldable push handle and hose support Lifting eyelets and forklift handling slot		2 large wheels, 2 pivoting wheels Foldable push handle and hose support Lifting eyelets and forklift handling slot	



offline machine maintenance

CRYONOMIC® dry ice grit blasting module

Abrasive module

CRYONOMIC® Dry ice grit blaster

Simply add the CRYONOMIC® Abrasive module to your dry ice blaster and take advantage of the dry ice grit blasting possibilities.

Dry ice grit blasting combines both dry ice and a minimum quantity of abrasive agent, to give the only true ecological way of grit blasting!0

Advantages compared to other cleaning techniques:

- › Reducing significantly the quantity of abrasive compared to sand blasting
- › More ecological abrasive blasting
- › Easier and faster cleaning up, reducing the volume of secondary waste
- › Extending the scope of general contract cleaning companies significantly with one machine
- › No heating up or deforming of the contaminated product

Typical applications: rust removal, asbestos and lead paint removal, façade cleaning, paint stripping, surface roughening before painting, coating, graffiti removal, stubborn material removal, ...



 Suitable for:

 To watch a video click [here](#)

Dry ice production machines

Pelletisers

- › CIP 5XS
- › CIP 5S
- › CIP 5M
- › CIP 5L



Pellet production

CIP 5 Series

Production of high density dry ice pellets and dry ice sticks

The CRYONOMIC® CIP 5 Series offer a versatile and economical solution for producing your own high density dry ice.

- › The CIP 5 Series exist in 4 models:
 - CIP 5XS up to 35 kg/h
 - CIP 5S up to 80 kg/h
 - CIP 5M up to 160 kg/h
 - CIP 5L up to 300 kg/h
- › Producing 3 mm pellets; 10 or 16 mm sticks
- › **Quick and easy change of extrusion dies**
- › Supply Liquid CO₂ Pressure: 16 - 21 bar storage tank
- › **Hydraulic silent motor with fast start-up protocol**
- › Oil entirely separated from dry ice
- › **Ergonomic touchscreen control panel**

Dry ice can be used for a lot of applications in different industries:
dry ice cleaning, cooled transport, process cooling, carbonic
maceration, fire extinguisher, declamping of metal parts, smoke
generation for show effects, ...

DID YOU KNOW?

Dry ice is the solid form of CO₂ and has a temperature of -78°C. At atmospheric pressure it evaporates to CO₂ gas.

To produce dry ice, you need a CO₂ gas tank and supply line between tank and pelletiser. Contact your local gas distributor about their possibilities.



How to choose your CRYONOMIC® dry ice production machine?



CHARACTERISTICS	CIP 5XS art. P22800	CIP 5S art. P22700	CIP 5M art. P22600	CIP 5L art. P22500
Production capacity ¹	Up to 35 kg/h	Up to 80 kg/h	Up to 160 kg/h	Up to 300 kg/h
Pellet diameter	3 mm, 10 mm or 16 mm			
Weight (excl. hydraulic oil)	115 kg	310 kg	530 kg	800 kg
Oil content	8 l	36 l	54 l	90 l
Power consumption	2 kW	3 kW	7,5 kW	9 kW
Power supply	230V / 50Hz	400V / 50Hz / 3Ph+E		
Supply liquid CO ₂	Liquid CO ₂ moisture: < 65 ppm and completely oil free			
Supply pressure liquid CO ₂	16 - 21 bar			
Inlet connection liquid CO ₂	½" BSP	½" BSP	½" BSP	¾" BSP
Outlet gas CO ₂	1" BSP	2" BSP	2" BSP	2" BSP
Dimensions excl. Outlet (l x w x h)	780 x 310 x 1.000 mm	1.000 x 705 x 1.035 mm	1.380 x 710 x 1.785 mm	1.600 x 830 x 1.805 mm

¹ The production capacity depends on pellet diameter, gas tank pressure and status, liquid CO₂ temperature, atmospheric conditions and user settings.

Dry ice containers

CIC-containers

- › CIC 85
- › CIC 150
- › CIC 300
- › CIC 500



Dry ice containers

CIC-containers

Containers for dry ice transportation

- › Monobloc structure in polyethylene
- › Enlarged wall thickness
- › Isolation material: polyurethane
- › Frame in stainless steel
- › Stackable and accessible at four sides
- › Drain hole to ease cleaning
- › Lid opening assisted by gas springs
- › Ergonomic depth and level bottom surface
- › Rust proof parts for a unlimited life span
- › Metal components in protected positions



Stainless steel parts for an unlimited life span



Lid opening assisted by gas springs



Robust stainless steel lock and silicone seal



CHARACTERISTICS	CIC 85 art. Q22080	CIC 150 art. Q22070	CIC 300 art. Q22060	CIC 500 art. Q22050
Storage capacity	85 litre	150 litre	300 litre	500 litre
Storage (3mm pellets)	± 68 kg	± 120 kg	± 240 kg	± 400 kg
Empty weight	20 kg	55 kg	80 kg	100 kg
Wall thickness	70 mm polyurethane	97,5 mm polyurethane	97,5 mm polyurethane	97,5 mm polyurethane
Inner dimensions (l x w x h)	610 x 340 x 410 mm	605 x 405 x 610 mm	805 x 605 x 610 mm	1.005 x 805 x 610 mm
Outer dimensions (l x w x h)	800 x 480 x 550mm	800 x 600 x 930mm	1000 x 800 x 930mm	1200 x 1000 x 930mm
Pallet or wheels	non or wheels (trolley)	pallet or wheels	pallet or wheels	pallet

Dry ice containers

Technical specifications

The strong and hygienic CIC series combines the quality and hygiene of the monobloc structure in polyethylene with the use of metal components realised exclusively in stainless steel.

The containers are made with an isolation technique that assures a perfect attachment of the isolation with the inner and outer walls of the container. Even in contact with low temperatures of dry ice the walls will not deform.



hygienic silicone packing, easy to disassemble and reassemble, permits easy cleaning

lid opening assisted by gas springs, safe for operators.

hinges, lock and gas pistons are **rust proof and mounted** in a protected position

depth of the container at the inside is not too high, allowing every user to empty the dry ice from the bottom without problems

level (flat) bottom surface to shovel the ice out of the container easily

accessible from four sides by pallet truck and fork lift



stackable: the lid is equipped with seats for that permit steady stacking of containers

all mechanical parts are screwed onto large threaded inserts built onto plates set in the shell of the product

a drain hole in the bottom to flow water of condensation and to ease cleaning



inline production



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Look for your contact at www.cryonomic.com