



**DRY ICE PRODUCTION MACHINES
& DRY ICE CONTAINERS**

CIP and CIC series

Efficient dry ice production!

Dry ice is the solid form of CO₂ with a temperature of -79°C. At ambient conditions, dry ice sublimates directly from solid to gas. Dry ice can be used for a lot of applications in different industries:

- › dry ice cleaning
- › cooled transport
- › catering industry
- › transport of medical goods
- › declamping of metal parts
- › smoke generation for show effect
- › carbonic maceration
- › process cooling
- › inerting a storage tank

The CRYONOMIC® CIP-5 pelletisers offer a versatile and economical solution for producing up to 300 kg/h of high density dry ice.

The CIP-5 series can be delivered with different extrusion dies. The pelletisers can produce:

- › 3 mm dry ice pellets for dry ice cleaning
- › 10 and 16 mm dry ice sticks for cooling and other applications



The CIP-5 series exist in 4 models:

- | | | |
|-----------|-----------------|----------------|
| › CIP-5XS | <i>produces</i> | up to 35 kg/h |
| › CIP-5S | | up to 100 kg/h |
| › CIP-5M | | up to 180 kg/h |
| › CIP-5L | | up to 300 kg/h |

Unique characteristics of CIP-5 series

- › **Continuous measurement** and autotuning of important process parameters to guarantee safe and reliable operation
- › **Integrated pressure regulator** allows safe operation and constant pellet quality & production rate independent of variations in supply pressure
- › Visual and acoustic **alarm with error logging and operation stop** when these parameters are out of spec
- › All functionalities are displayed on an **ergonomic touch screen**
- › Three **modes of stopping production**: manual, on time and by external trigger such as scale or CO₂ detector.
- › **Remote start/stop** possible
- › **Production pause function** to prevent waste of production during change of container
- › **Run dry time function** that allows to empty the CO₂ supply line after having closed the supply valve
- › Switching extrusion plates can be done in a few minutes
- › **Hydraulic silent motor** with fast start-up protocol



Touchscreen control panel



Quick die change with 4 bolts



Dry ice blasting machines can directly be filled with dry ice

Options:



Integrated scale



Pelletiser, scale and CO₂ detector can be controlled by a remote controller



CO₂ detector

CIP-5 series pelletisers



| | 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 100 kg/h | Up to 180 kg/h | Up to 300 kg/h |
| Pellet diameter | 3 mm, 10 mm, 16 mm | | | |
| Dimensions excl. outlet in mm (L x W x H) | 1.000 x 400 x 880 | 1.000 x 705 x 1.035 | 1.380 x 710 x 1.785 | 1.600 x 830 x 1.805 |
| Weight (excl. hydraulic oil) | 130 kg | 310 kg | 530 kg | 800 kg |
| Oil content (l) | 8 | 36 | 54 | 90 |
| Power consumption | 3 kW | 3 kW | 7,5 kW | 9 kW |
| Power supply | 400V/ 50Hz/ 3Ph+N+PE | | | |
| Supply liquid CO ₂ | Liquid CO ₂ moisture: 65 ppm and completely oil free | | | |
| Pressure liquid CO ₂ | 16 - 21 bar | | | |
| Inlet connection liquid CO ₂ | 1/2" BSP | 1/2" BSP | 3/4" BSP | 3/4" BSP |
| Outlet gas CO ₂ | 1" BSP | 1" 1/4 BSP | 2" BSP | |

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

Dry ice containers

The strong and well isolated Dry ice Containers, CIC series (CRYONOMIC® Isolated Containers) combines the quality and hygiene of the monobloc structure in polyethylene with stainless steel reinforcements. These dry ice containers are very well isolated with a K-value of 0,29 W/m²K.

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.

Unique characteristics of CIC-series



2 adjustable stainless steel closures (lockable)



Integrated full length hinge



Hygienic silicone seal



Including document holder



Perfectly stackable



Lid opening assisted by gas springs



Sloping bottom with drain hole in the bottom and closing dop



Exchangeable steel feet or 4 pivoting wheels (2 bracked)

Extra features

The CRYONOMIC® dry ice containers are:

- › **Food grade qualified**
- › Fully recyclable at end of life
- › Perfectly washable
- › Limited height for easy filling and safe emptying
- › Made with rotational molding technology: one-piece container and lid (without edges, joints or welds)



CRYONOMIC® dry ice containers are used worldwide under extreme temperature conditions in Africa, South-America, Asia, ...

Technical information



| | CIC70 art. Q22083 | CIC151 art. Q22073P (on pallet) art. Q22073W (on wheels) | CIC370 art. Q22063P (on pallet) art. Q22063W (on wheels) | CIC550 art. Q22053P (on pallet) |
|--|-----------------------------|---|---|---|
| Outer dimensions on pallet (L x W x H) in mm | 850 x 450 x 390 | 800 x 600 x 900 | 1.200 x 800 x 900 | 1.200 x 1.100 x 900 |
| Inner dimensions (L x W x H) in mm | 750 x 330 x 270 | 620 x 420 x 578 | 1.020 x 620 x 578 | 1.020 x 920 x 578 |
| Internal volume | 70 ltr | 151 ltr | 370 ltr | 550 ltr |
| Storage capacity for 3 mm pellets | ± 55 kg | ± 125 kg | ± 300 kg | ± 440 kg |
| Empty weight | 13 kg | 49 kg | 85 kg | 100 kg |
| Wall thickness | 55 mm | 90 mm | 90 mm | 90 mm |
| Pallet or wheels | trolley 2 wheels in option | pallet or wheels | pallet or wheels | pallet |
| Adjustable closures | No | Yes | Yes | Yes |

CRYONOMIC® references



... and many more!

CRYONOMIC®
DRY ICE CLEANING SOLUTIONS
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Scan me to
visit our website

Contact your local distributor
for technical advice or for a demonstration:

Look for your contact at www.cryonomic.com

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