



# DRY ICE PRODUCTION MACHINES

& DRY ICE CONTAINERS

**CIP and CIC series** 

### **Efficient dry ice production!**

**Dry ice** is the solid form of CO<sub>2</sub> with a temperature of -79°C. At ambient conditions, dry ice sublimes 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
- produces
- up to 35 kg/h up to 100 kg/h
- > CIP-5S > 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub> detector can be controlled by a remote controller



CO, detector









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	<b>CIP-5XS</b> art. P22800	<b>CIP-5S</b> art. P22700	<b>CIP-5M</b> art. P22600	<b>CIP-5L</b> 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 $\times$ W $\times$ 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 (I)	8	36	54	90		
Power consumption	3 kW	3 kW	7,5 kW	9 kW		
Power supply	400V/50Hz/3Ph+N+PE	1z/ 3Ph+N+PE 400V/ 50Hz/ 3Ph+PE				
Supply liquid CO <sub>2</sub>	Liquid CO <sub>2</sub> moisture: 65 ppm and completely oil free					
Pressure liquid CO <sub>2</sub>	16 - 21 bar					
Inlet connection liquid CO <sub>2</sub>	1/2" BSP	1/2" BSP	3/4" BSP	3/4" BSP		
Outlet gas CO <sub>2</sub>	1" BSP	1" 1/4 BSP	2" BSP			

 $<sup>^{(1)}</sup>$  The production capacity depends on pellet diameter, gas tank pressure, liquid CO $_{\circ}$  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  $0.29 \text{ W/m}^2\text{K}$ .

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**









	<b>CIC85</b> art. Q22080	<b>CIC151</b> 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	800 x 480 x 550	800 x 600 x 900	800 x 1.200 x 900	1.100 x 1.200 x 900
Inner dimensions (L $\times$ W $\times$ H) in mm	620 x 320 x 360	620 x 420 x 578	620 x 1.020 x 578	920 x 1.020 x 578
Internal volume	85 ltr	151 ltr	370 ltr	550 ltr
Storage capacity for 3 mm pellets	± 70 kg	± 125 kg	± 300 kg	± 440 kg
Empty weight	20 kg	49 kg	85 kg	100 kg
Wall thickness	95 mm	90 mm	90 mm	90 mm
Pallet or wheels	separate trolley in option	pallet or wheels	pallet or wheels	pallet
Adjustable closures	No	Yes	Yes	Yes

# **CRYONOMIC®** references















... and many more!





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