

# **DRY ICE PELLETISERS**



## **CIP-SERIES**

FOR EVERY DRY ICE NEED A FITTING MODEL

**Dry ice** is the solid form of CO2 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
- refrigerated transport
- > catering industry
- transport of medical goods
- declamping of metal parts
- > smoke generation for show effect
- carbonic maceration
- process cooling
- inerting a storage tank

Depending on the size of the company and the use of the dry ice, different sizes of pelletisers are available, ranging from XS to L.:



CIP-5S: " 100 kg dry ice/hour
CIP-5M: " 180 kg dry ice/hour
CIP-5L: " 320 kg dry ice/hour



The CIP-5 series can be delivered with different extrusion plates. The pelletisers can produce different formats of dry ice:

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

### To produce your own dry ice you need the following components:

- **1.** A tank of 2.000-50.000 liters liquid  ${\rm CO_2}$  under pressure of 20 bar en with a constant temperature of -20°C.
- 2. CRYONOMIC dry ice pelletizer
- **3.** CRYONOMIC dry ice containers: alle info about these containers can be found in the leaflet. "Dry ice containers".



#### **Unique characteristics of the CIP-5 series**

- > Continuous measurement and auto-tuning of key process parameters to ensure safe and reliable operation
- Integrated pressure regulator ensures safe operation and constant pellet quality and production rate independent of changes in supply pressure
- > Visual and audible alarm with error recording and operation stop when these process parameters are out of spec
- All functionalities are displayed on an **ergonomic touchscreen**.
- → Three ways to stop production: manual, on time and by external trigger such as scale or CO₂ detector.
- > Remote start/stop possible
- Production pause function to avoid production waste when changing containers
- → Delayed production stop that allows the CO<sub>2</sub> supply line to be emptied after closing the supply valve
- > Changing extrusion plates can be done in a few minutes
- > Hydraulic silent motor with fast start-up protocol



Control panel with touch screen



Changing extrusion plates is very easy (4 bolts).



The dry ice blasting machine can be filled directly with dry ice.

### **Extra options:**



Integrated scale



Pellitiser, scale and CO<sub>2</sub>detector can be operated with a remote controller



CO2-detector

#### **Technical information CIP-5 series**









CIP-5 SERIES	<b>CIP-5XS</b> art. P22800	<b>CIP-5S</b> art. P22700	<b>CIP-5M</b> art. P22600	<b>CIP-5L</b> art. P22500
Productioncapacity (1)	Tot 35 kg/h	Tot 100 kg/h	Tot 180 kg/h	Tot 320 kg/h
Pellet diameter	3 mm, 10 mm, 16 mm			
Dimensions excl. socket 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)	18	36	54	90
Power consumption	3 kW	3 kW	7,5 kW	9 kW
Power supply	400V/ 50Hz/ 3Ph+N+PE	0V/ 50Hz/ 3Ph+N+PE 400V/ 50Hz/ 3Ph+PE		
Liquid CO <sub>2</sub> supply	Liquid CO2 moisture: < 65 ppm and completely oil free			
Pressure liquid CO <sub>2</sub>	16 - 21 bar			
Inlet connection liquid CO2	1/2" BSP	1/2" BSP	3/4" BSP	3/4" BSP
Outlet gas CO2	1" BSP	1" 1/4 BSP	2" BSP	3/4" BSP 2" BSP
<sup>(1)</sup> Production capacity depends on pellet diameter, gas tank pressure, liquid CO2 temperature, atmospheric condition and user settings.				

<sup>(</sup>i) Production capacity depends on pellet diameter, gas tank pressure, liquid CO2 temperature, atmospheric condition and user settings.

#### How to store and transport dry ice?

In order to store the produced dry ice as effectively and as long as possible, we have designed special dry ice containers: the CRYONOMIC® Isolated Containers or CIC series. These strong and well-insulated containers combine quality and hygiene of the monobloc structure in polyethylene with stainless steel reinforcements.

The CRYONOMIC® dry ice containers are:

#### > Food grade qualified

- > Fully recyclable at the end of its lifespan
- > 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 temperatures in all continents of the world.





#### **SMALL CIC-FAMILY**

3 small containers, ideal for companies that regularly need to transport or store smaller quantities of dry ice. These containers are ideal for labs, transport of small goods, catering, smoke machines...

Capacity: from 26 kg to 73 kg dry ice



#### **BIG CIC-FAMILY**

3 large containers, which have already proven their worth for companies that have to transport or store large quantities of dry ice. These containers are suitable for dry ice blasting machines for chemical companies, renovation companies, transport of vaccines and medical products...

Capacity: from 125 kg to 440 kg dry ice

For more technical information and references, please visit our website www.cryonomic.com or scan this QR code:



#### **CRYONOMIC**

info@cryonomic.com www.cryonomic.com

Kleimoer 3 • 9030 Ghent • Belgium (EU) Tel: +32 9 216 76 90

Contact your local distributor

for technical advice or for a demonstration: