

## DRY ICE PRODUCTION MACHINES

## \& DRY ICE CONTAINERS

CIP and CIC series

## Efficient dry ice production!

Dry ice is the solid form of $\mathrm{CO}_{2}$ with a temperature of $-79^{\circ} \mathrm{C}$. 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 ${ }^{\circledR}$ CIP- 5 pelletisers offer a versatile and economical solution for producing up to $300 \mathrm{~kg} / \mathrm{h}$ 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 $35 \mathrm{~kg} / \mathrm{h}$ |
| :--- | :--- | :--- |
| , CIP-5S | up to $100 \mathrm{~kg} / \mathrm{h}$ |  |
| , CIP-5M | up to $180 \mathrm{~kg} / \mathrm{h}$ |  |
| , CIP-5L | up to $300 \mathrm{~kg} / \mathrm{h}$ |  |

## 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 $\mathrm{CO}_{2}$ 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 $\mathrm{CO}_{2}$ 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 $\mathrm{CO}_{2}$ detector can be controlled by a remote controller

$\mathrm{CO}_{2}$ detector

|  | $\begin{aligned} & \text { CIP-5XS } \\ & \text { art. P22800 } \end{aligned}$ | $\begin{gathered} \text { CIP-5S } \\ \text { art. P22700 } \end{gathered}$ | $\begin{gathered} \text { CIP-5M } \\ \text { art. P22600 } \end{gathered}$ | $\begin{gathered} \text { CIP-5L } \\ \text { art. P22500 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Production capacity ${ }^{(1)}$ | Up to $35 \mathrm{~kg} / \mathrm{h}$ | Up to $100 \mathrm{~kg} / \mathrm{h}$ | Up to $180 \mathrm{~kg} / \mathrm{h}$ | Up to $300 \mathrm{~kg} / \mathrm{h}$ |
| Pellet diameter | $3 \mathrm{~mm}, 10 \mathrm{~mm}, 16 \mathrm{~mm}$ |  |  |  |
| Dimensions excl. outlet in mm ( $\mathrm{L} \times \mathrm{W} \times \mathrm{H}$ ) | $1.000 \times 400 \times 880$ | $1.000 \times 705 \times 1.035$ | $1.380 \times 710 \times 1.785$ | $1.600 \times 830 \times 1.805$ |
| 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 | $400 \mathrm{~V} / 50 \mathrm{~Hz} / 3 \mathrm{Ph}+\mathrm{N}+\mathrm{PE}$ |  | $400 \mathrm{~V} / 50 \mathrm{~Hz} / 3 \mathrm{Ph}+\mathrm{PE}$ |  |
| Supply liquid $\mathrm{CO}_{2}$ | Liquid $\mathrm{CO}_{2}$ moisture: 65 ppm and completely oil free |  |  |  |
| Pressure liquid $\mathrm{CO}_{2}$ | 16-21 bar |  |  |  |
| Inlet connection liquid $\mathrm{CO}_{2}$ | 1/2" BSP | 1/2" BSP | 3/4" BSP | 3/4" BSP |
| Outlet gas $\mathrm{CO}_{2}$ | $1{ }^{\prime \prime} \mathrm{BSP}$ | 1" 1/4 BSP | 2" BSP |  |

${ }^{(1)}$ The production capacity depends on pellet diameter, gas tank pressure, liquid $\mathrm{CO}_{2}$ temperature, atmospheric conditions and user settings.

## Dry ice containers

The strong and well isolated Dry ice Containers, CIC series (CRYONOMIC ${ }^{\circledR}$ 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 $0,29 \mathrm{~W} / \mathrm{m}^{2} \mathrm{~K}$.

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

Sloping bottom with drain
hole in the bottom
Sloping bottom with drain
hole in the bottom and closing dop



Including document holder


Perfectly stackable


Lid opening assisted by gas springs


Exchangeable steel feet or 4 pivoting wheels (2 bracked)

## Extra features

The CRYONOMIC ${ }^{\circledR}$ 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 ${ }^{\oplus}$ dry ice containers are used worldwide under extreme temperature conditions in Africa, South-America, Asia, ...

Technical information

| , |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { CIC85 } \\ \text { art. Q22080 } \end{gathered}$ | CIC151 <br> art. Q22073P (on pallet) art. Q22073W (on wheels) | CIC370 <br> art. Q22063P (on pallet) art. Q22063W (on wheels) | CIC550 art. Q22053P (on pallet) |
| Outer dimensions on pallet ( $\mathrm{L} \times \mathrm{W} \times \mathrm{H}$ ) in mm | $800 \times 480 \times 550$ | $800 \times 600 \times 900$ | $800 \times 1.200 \times 900$ | $1.100 \times 1.200 \times 900$ |
| Inner dimensions ( $\mathrm{L} \times \mathrm{W} \times \mathrm{H}$ ) in mm | $620 \times 320 \times 360$ | $620 \times 420 \times 578$ | $620 \times 1.020 \times 578$ | $920 \times 1.020 \times 578$ |
| Internal volume | 85 ltr | 151 ltr | 370 Itr | 550 ltr |
| Storage capacity for 3 mm pellets | $\pm 70 \mathrm{~kg}$ | $\pm 125 \mathrm{~kg}$ | $\pm 300 \mathrm{~kg}$ | $\pm 440 \mathrm{~kg}$ |
| 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 ${ }^{\circledR}$ references

3M
(Q) Air Liquide OTET

SRIDGESTOME (T)N

## FedEx

 ... and many more!

