

ICE TECH

IceMaker PR150



IceMaker PR300



PELLETIZER

For Production of Dry Ice Pellets



01 : 03 : 04 : 06

02 : 03 : 04 : 06 : 08

The IceMaker from IceTech is the optimum solution for the continuous production of high-density dry ice pellets.

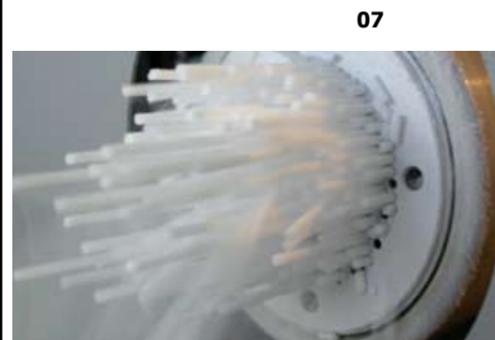
A special pipeline connects the IceMaker to a storage tank with liquid CO₂. The liquid CO₂ flow is regulated and part of it is converted into CO₂ snow by means of sudden, artificially induced changes in pressure and temperature. The CO₂ snow is then compressed by a single-acting, horizontally reciprocating piston which presses it through an extruder plate in order to produce high-density dry ice pellets.

A specially designed heat exchanger assures that the cooling time is minimized and that the production start-up is accelerated in order to maintain a production of homogeneous dry ice pellets of high quality. The heat exchanger is adaptable to local conditions at each installation in order to obtain the best possible performance in each case.

The IceMaker is mounted in a solid, firm and closed steel cabinet. The cabinet is muffled in order to limit the noise level.

Inlet Pressure - Liquid CO₂
bar: 15-20 | psi: 217-290

Specifications - Liquid CO₂
According to the EIGA/ISBT 1990 a min. CO₂ purity of 99.9% is required. The water contents should not exceed 30 ppm and should not be less than 5 ppm
NOTE: The liquid supply must be completely free of oil



07



04

PELLETIZER PR150 / PR300

For Production of Dry Ice Pellets

01: Dry Ice Production

Individual dry ice production in the two barrels. Possible to maintain 50% of the production capacity during servicing – no downtime!!

02: User-Friendly Control Display

The control display includes: Adjustment of production output, digital display of inlet CO₂ temperature, revert pressure in and out, and registration of production hours.

03: Crankshaft Housing

Inside the crankshaft housing, the crankshaft is rotated by the flywheel. This rotating movement is converted into a reciprocating movement of the extruder cylinder. The housing is manufactured using CNC milling and is made from just one massive block of heavy-duty aluminium to ensure optimum precision and long life.

04: Conversion of CO₂

The liquid CO₂ is sprayed into the cyclone where it is converted partly into CO₂ snow and partly into CO₂ gas. This conversion is a continuous process during which the gaseous CO₂ is used to cool down the production unit, whereas only the CO₂ snow is fed into the piston chamber. The blank nickel-plated pipes inside the equipment are made from corrosion resistant material with optimum heat conducting properties.

05: Pellet Size

The extruder plates are available in different sizes and can easily be changed within a minute.

06: Electrical Control System

Standard IceMaker systems are supplied with an electrical control which monitors the motor, valves, temperature measurement, pressure sensors, etc. As an optional extra, the machine can be delivered with an interface for external units, such as a weight for automatic container filling, packaging systems, etc.

07: Dry Ice Pellets

The IceMaker production unit can produce high-density dry ice pellets in various dimensions. The temperature of the solid CO₂ pellets is -79°C/-110°F.

08: Adjustable Heat Exchanger

The heat exchanger ensures a high level of CO₂ utilisation. The CO₂ gas from the process is let into the heat exchanger to cool down the inlet liquid CO₂ from the tank to a temperature around -38°C/-36°F for optimum efficiency. The heat exchanger can be adjusted to meet the requirements for all types of CO₂ supply.

09: Lightweight Dry Ice Containers

Reduction of sublimation due to maximum insulation of both lid and container as well as special gasket in lid. Dimensions acc. to EURO pallets advance max. utilisation of space during transport. Stackable modular containers. Available in different sizes to meet all purposes.

CE The electrical components are listed in the UL certification system.

01

02





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Distributor

TECHNICAL DATA

PR150

Dimensions mm/inch

Length: 1300 / 51
Width: 700 / 27.5
Height: 1625 / 64
Height: 1845 / 72.6 (incl. ext. legs)

Weight

kg: 700
lbs: 1543

Rated Output

kg/h: up to 120-200
lbs/h: up to 265-441
of high quality dry ice pellets, depending on the extruder plate applied

Power Supply

4 kWh, 3 phases, 400 V

PR300

Dimensions mm/inch

Length: 1300 / 51
Width: 1300 / 51
Height: 1625 / 64
Height: 1845 / 72.6 (incl. ext. legs)

Weight

kg: 1250
lbs: 2755

Rated Output

kg/h: up to 240 - 400
lbs/h: up to 529 - 882
of high quality dry ice pellets, depending on the extruder plate applied

Power Supply

2 x 4 kWh, 3 phases, 400 V

PR150 - PR300

Noise level 75 - 80 dB(A)