Dry Ice Production

ASCO Dry Ice Pelletizer P15i-D3

part no. 901310





The **ASCO** Dry Ice Pelletizer P15i is a compact and powerful dry Ice machine from our **i-Series line**. Having a production capacity of 150 kg/h (331 lb/h) it meets the demands for higher dry ice quantities plus quality and flexibility in the daily working process.

As a model of **ASCO**'s i-Series, it is equipped with state-of-the-art remote control devices and thus is ready for a wide range of services in the areas of **Remote Access**, **Remote Data**, **Remote Management**. Whether for fast and efficient trouble shooting and maintenance or for gathering production and performance data - the **ASCO** i-Series offers a wide range of possibilities to **link Industry 4.0** with dry ice production.

The **ASCO** Dry Ice Pelletizer P15i is driven by a powerful hydraulic unit featuring instant push button start. All functions are controlled by a Siemens PLC with touch screen. A fully automatic control of oil temperature and dry ice snowing process guarantees continuous dry ice production without any supervision right from pushing the start button.

To maximise the CO_2 to dry ice conversion ratio the dry ice pelletizer can be connected to an **ASCO** Revert Gas Recovery System.

Benefits of an in-house dry ice production:

- more efficient cleaning results, because the fresher the dry ice, the more efficient the cleaning
- · shorter production stops
- · reduction of dry ice lost due to sublimation
- · decreased logistics expense connected with purchasing and disposing of dry ice



Extruder plate for 3 mm (1/8 ") pellets

The dry ice pelletizer P15i-D3 is standardly equipped with an extruder plate for pellets with a diameter of 3 mm (1/8 ").

Specifications

Voltage:

Production capacity: $150 \text{ kg/h} (331 \text{ lb/h}) \pm 5\% \text{ at } 16-20 \text{ bar}$ $(232-290 \text{ psi}) \text{ CO}_2 \text{ inlet pressure}$

400 VAC ± 5 %/50 Hz/3 Ph + PE

(other voltages and frequencies on request)

Max. power consumption: 5.6 kW (7.5 HP)

Dimensions (L x W x H): 1'560 x 800 x 1'450 mm (61 x 32 x 57 in)
Weight net: 440 kg (970 lb) (without hydraulic oil)
500 kg (1'100 lb) (with hydraulic oil)

Weight packed: approx. 550 kg (1'213 lb) (without hydraulic oil)

CO₂ inlet connection: 1" BSP female CO₂ source: CO₂ storage tank,

liquid phase (16-20 bar) (232-290 psi)

Connectivity and remote access: LAN, Ethernet, WiFi, 3G (other data services on demand)



ASCO Dry Ice Pelletizer P15i-D3: Function and applications

The **ASCO** Dry Ice Pelletizer P15i requires a liquid CO₂ supply (pressure 16-20 bar) (232-290 psi) and power supply of 400 V / 50 Hz /3 Ph + PE (other voltages available on request). The machine features instant push button start and all functions are controlled by an inbuilt PLC. Dry ice snow is produced in the snowing chamber, pressed and then extruded by a powerful hydraulic unit. Hard, dense dry ice pellets are produced shortly after pushing the start button.

To ensure continuous, reliable operation of the pelletizer, oil temperature, oil level, cycle time, injection time, operation hours, due date of service, motor overload, amount dry ice produced since last start, CO₂ inlet pressure and hydraulic pressure are all monitored and displayed on the touch screen of the P15i's PLC.

Options

The **ASCO** Dry Ice Pelletizer P15i is standardly equipped with an extruder plate for the production of pellets with a diameter of 3 mm (1/8 "). Such pellets are used especially for dry ice blasting purposes. Optional extruder plates for the production of 10 mm (3/8 ") and 16 mm (5/8 ") pellets (for cooling purposes) are also available. other dimensions are available on request. The P15(i), however, can also be delivered standardly equipped with such an extruder plate.

Pellet size	3 mm (1/8 ")	10 mm (3/8 ")	16 mm (5/8 ")
Operating range	Dry ice blasting	Cooling purposes	Cooling purposes

ASCO Dry Ice Pelletizer P15i-D3: Key features

- PLC SIEMENS-S7-1200 controls the complete process, injection and hydraulic
- Siemens touch screen 7"-with different access levels and information regarding the started production
- Remote control devices offers a wide range of possibilities to link Industry 4.0 with dry ice production
- **Independent performance**-very constant production, independent of pressure and temperature in the range of 16 20 bar (232 -290 psi).
- Integrated production control system-definition and supervision of production quantity
- High process reliability optimised process monitoring provides optimal performance and increases process reliability
- Easy maintenance / optimal service planning-comprehensive error history, indication on touch screen when next service is due
- Minimum floor space for high production performance



ASCO Dry Ice Pelletizer P15i-D3: Standard scope of delivery

Extruder plate for 3 mm (1/8 ") pellets

Pellets for blasting purposes

part no. 4044250



i-Series

Enables remote access and data services via LAN, Ethernet, WiFi, 3G (other data services on demand) Discounts, features, period of validity and monthly subscription fees depend on the selected i-Series service contract.



ASCO Dry Ice Pelletizer P15i-D3: Options

Pos. 001

Extruder plate for 10 mm (3/8 ") pellets

Pellets for cooling purposes





Pos. 002

Extruder plate for 16 mm (5/8 ") pellets

Pellets for cooling purposes

part no. 4044253



Pos. 003

Spare parts kit

Includes a recommended selection of spare parts to ensure constant operation.

part no. 4066011



Sample image

Pos. 004

Connecting Kit 1" A220P/A240P/P15i/P28i

For flexible connection.

Lenght: 1.5 m

part no. 4044246



