# **Dry Ice Production**

## **ASCO Dry Ice Pelletizer P55i**

part no. 901461





The **ASCO** Dry Ice Pelletizer P55i is one of the most powerful dry Ice machines from **ASCO**'s i-Series line. Having a production capacity of 550 kg/h (1212 lb/h) it meets the demands for high 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-ofthe-art remote control devices and thus is ready for a wide range of services in the areas of **Remote Access, Remote Data, Remote Management.** 

Be it 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 P55i is driven by two powerful hydraulic units, which are running **independently** by the push of a button. This allows the **production of identical or different pellet sizes** in combination with the offered extruder plates. All functions are controlled by a Siemens PLC with a 12" 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 to 90 - 95% the dry ice pelletizer can be connected to an **ASCO** Revert Gas Recovery System.

Standardly equipped without extruder plates.

Please refer to the options below.

#### **Specifications**

Weight packed:

Production capacity: 550 kg/h (1212 lb/h)

± 5 % at 16 - 19 bar (232-275 psi) CO<sub>2</sub> inlet pressure

Voltage: 400 VAC ± 5 %/50 Hz/3 Ph + PE

(other voltages and frequencies on request)

Max. power consumption: 11.3 kW (15.2 HP)

Dimensions (L x W x H): 1'600 × 1'500 × 1'650 mm (63 x 59 x 65 in)

Weight net: 1'660 kg (3'660 lb) (without hydraulic oil)

1'770 kg (3'902 lb) (with hydraulic oil)

approx. 1'830 kg (4'034 lb) (without hydraulic oil)

CO<sub>2</sub> inlet connection: 1" BSP female

CO<sub>2</sub> source: CO<sub>2</sub> storage tank, liquid phase (16-20 bar) (232-290 psi) LAN, Ethernet, WiFi, 3G (other data services on demand)



### ASCO Dry Ice Pelletizer P55i: Function and applications

The **ASCO** Dry Ice Pelletizer P55i requires a liquid  $CO_2$  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 and operated via the 12" touch screen. Dry ice snow is injected into the two snow chambers, pressed and then extruded by two powerful and independent hydraulic units. 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,  $CO_2$  inlet pressure and hydraulic pressure are all monitored and displayed on the touch screen of the P55i's PLC. This data can also be evaluated and stored permanently via suitable i-Series service contracts.

Various production modes enable a "non-stop" production, the production to a defined pre-set quantity or a fully automatic operation with input and output signals via the digital COM Interface.

### **Options**

The **ASCO** Dry Ice Pelletizer P55i is standardly not equipped with an extruder plate for the production of pellets. Optional extruder plates for the production of 1.7 mm (1/16 ") and 3 mm pellets (1/8 ") (for blasting purposes), 10 mm (3/8 ") and 16 mm (5/8 ") pellets (for cooling purposes) are also available.

Pellet size	1.7 mm (1/16 ")	3 mm (1/8 ")	10 mm (3/8 ")	16 mm (5/8 ")
Operating range	Dry Ice Blasting (structured surfaces)	Dry Ice Blasting	Cooling purposes	Cooling purposes

## ASCO Dry Ice Pelletizer P55i: Key features

- PLC SIEMENS-ET200SP controls the complete process, injection and hydraulic
- Siemens TP1200 Comfort 12 " Touch-Screen with different access levels and information regarding the ongoing production
- **Digital 24V COM Interface and 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) for both dry ice exits
- Integrated production control system-definition and supervision of production quantity per cylinder
- 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 and service history available
- Minimum floor space for high production performance



### ASCO Dry Ice Pelletizer P55i: Standard scope of delivery

#### 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 P55i: Options**

#### Pos. 001

Extruder plate for 1.7 mm (1/16 ") pellets

Pellets for blasting purpose



Pos. 002

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

Pellets for blasting purposes



Pos. 003

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

Pellets for cooling purposes



Pos. 004

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

Pellets for cooling purposes



Pos. 005

Spare parts kit

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



sample image

part no. 4044246

Pos. 006

Connecting Kit 1" A220P/A240P/P15(i)/P28i/P55i

For flexible connection.

Lenght: 1.5 m



