# **Dry Ice Production**

## ASCO Dry Ice Reformer R70i



The ASCO Dry Ice Reformer R70i has been developed for producing dense dry ice blocks in various sizes by compressing dry ice pellets. Be it in combination with an existing or with a new dry ice pelletizer, the ASCO Dry Ice Reformer R70i is a very convenient tool to complement the dry ice pellet business with dry ice blocks.

The compact machine is driven by a powerful and unique hydraulic unit featuring instant push button start. All functions are controlled by a Siemens PLC. A Siemens touch screen provides good overview and easy operation, a comprehensive monitoring, easy maintenance and optimal service planning. An integrated production control system allows to define and supervise the amount of blocks or weight to be produced.

### **Specifications**

Production capacity\*: Voltage:

Dimensions  $(L \times W \times H)$ : Weight net:

Weight packed: Total power installed: Max. average power consumption: Standby mode: Connectivity and remote access: Basis media: Dry ice density blocks: Standard block/slice sizes: 300 to 700 kg/h (440-1543 lb) (depending on block size) 400 VAC ± 5 %/50 Hz/3 Ph + PE (other voltages and frequencies on request) 1'140 × 1'140 × 1'620 mm (45 x 45 x 64 in) approx. 510 kg (1122 lb) (without hydraulic oil) approx. 580 kg (1276 lb) (with hydraulic oil) 680 kg (1499 lb) 9.5 kW (12.7 HP) < 3 kW (4 HP) 0.6 kW (0.8 HP) LAN, Ethernet, 3G (other data services on demand) 3 mm (1/8 ") dry ice pellets  $\geq$  1.54 kg/dm<sup>3</sup> (96 lb/ft<sup>3</sup>) 210 × 125 mm (8.3 x 4.9 in), thickness 16 to 60 mm (0.6 to 2.3 in) resp. weight 650 to 2'430g (1.4 to 5.4 lb) (thickness and weight stepless adjustable)

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	Standard block /slice size 210 × 125 mm (8.3 x 4.9 in)								
Thickness in mm**	16	18	20	22	25	30	40	50	60
(Thickness in in)	(0.6)	(0.7)	(0.8)	(0.9)	(1)	(1.2)	(1.6)	(2)	(2.4)
Weight ing/block approx.	650	730	810	890	1'010	1'220	1'620	2'030	2'430
(Weight inlb/block approx.)	(1.4)	(1.6)	(1.8)	(2)	(2.2)	(2.7)	(3.6)	(4.5)	(5.4)
Performance in kg/h approx.	300	320	336	370	400	460	562	649	700
(Performance in lb/h approx.)	(661)	(705)	(741)	(816)	(882)	(1014)	(1'239)	(1'431)	(1'543)

The indications regarding production capacity are based on the use of 3 mm pellets, freshly produced on ASCO dry ice pelletizers.
This choice of sizes is only an extract and helps as production indication. The thickness or the weight of the blocks is alternatively stepless adjustable.



## ASCO Dry Ice Reformer R70i: Function and applications

The **ASCO** Dry Ice Reformer R70i is started on the 7" Siemens comfort touch screen panel. All functions are controlled by the inbuilt PLC. Dry ice pellets with a diameter of 3 mm (1/8 ") are filled into the dry ice hopper. From there they are conveyed to the pressing chamber automatically, where they are predosed and compressed into high-quality dry ice blocks.

To ensure continuous, reliable operation of the reformer, oil level, cycle time, operation hours, due date of service, motor overload, amount of produced dry ice blocks since last start and hydraulic pressure are all monitored and displayed on the touch screen of the R70i's PLC.

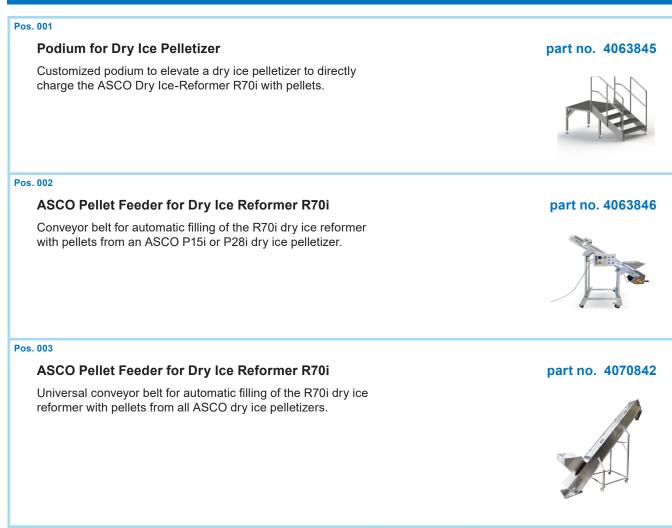
## Dry Ice Reformer R70i: Key features

- **SIEMENS PLC** controls the complete process, filling of the pressing chamber and the hydraulic with its main and side cylinder.
- Siemens comfort touch screen 7" HMI Multilingual 7" Touch-Screen with different access levels and adjustable parameters.
- Integrated production control system definition and supervision of amount of blocks or weight to be produced.
- Alternatively thickness or weight of blocks stepless adjustable (16 to 60mm (0.6 to 2.4 in) resp. 650 to 2'430 g (1.4 to 5.4 lb). Corresponding calculation happens automatically.
- Integrated block thickness control and fill level monitoring-dif the required amount of dry ice pellets in the hopper falls short, the machine automatically goes into a waiting mode until the correct fill level is reached again.
- **High process reliability** optimal process monitoring provides optimal performance and high process reliability.
- Remote control devices offers a wide range of possibilities to link Industry 4.0 with dry ice production
- System integration can be combined with all ASCO pelletizer and ASCO packaging machines APM120.





## Automatic Dry Ice Reformer R70i: Options



#### Pos. 004

#### Set of spares

Recommended set of spare parts for approx. one to two years normal operation.

#### part no. 4063494



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