Dry Ice Production

ASCO Dry Ice Reformer A700Ri

part no. 901026



The **ASCO** Dry Ice Reformer A700Ri 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 A700R 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 S7-1200. A 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.

Touch screen for good overview and easy operation



Specifications

Production capacity*: 300 to 700 kg/h (440 - 1543 lb) (depending on block size)

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

(other voltages and frequencies on request)
Dimensions (L×W×H):
1'140×1'140×1'620 mm (45 x 45 x 64 in)
weight net:
approx. 510 kg (1122 lb) (without hydraulic oil)

approx. 580 kg (1276 lb) (with hydraulic oil)

Weight packed: 680 kg (1499 lb)
Total power installed: 9.5 kW (12.7 HP)
Max. average power consumption: < 3 kW (4 HP)
Standby mode: 0.6 kW (0.8 HP)

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

Basis media: 3 mm (1/8 ") dry ice pelletsDry ice density blocks: $\geq 1.54 \text{ kg/dm}^3 (96 \text{ lb/ft}^3)$

Standard block/slice sizes: 210 × 125 mm (8.3 x 4.9 in), thickness 16 to 60 mm (0.6 to 2.3 in)

resp. weight 650 to 2'430 g (1.4 to 5.4 lb) (thickness and weight stepless adjustable)

	Standard block /slice size 210 × 125 mm (8.3 x 4.9 in)								
Thickness in mm** (Thickness in in)	16	18	20	22	25	30	40	50	60
	(0.6)	(0.7)	(0.8)	(0.9)	(1)	(1.2)	(1.6)	(2)	(2.4)
Weight in g / block approx. (Weight in lb/block approx.)	650	730	810	890	1'010	1'220	1'620	2'030	2'430
	(1.4)	(1.6)	(1.8)	(2)	(2.2)	(2.7)	(3.6)	(4.5)	(5.4)
Performance in kg/h approx. (Performance in lb/h approx.)	300	320	336	370	400	460	562	649	700
	(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 A700Ri: Function and applications

The **ASCO** Dry Ice Reformer A700Ri is started on the 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 A700Ri's PLC.

Dry Ice Reformer A700Ri: Key features

- PLC SIEMENS-S7-1200 controls the complete process, filling of the pressing chamber and the hydraulic with its main and side cylinder.
- **Siemens colour touch screen 7" HMI-** Multilingual 7" Touch-Screen with different access levels, adjustable parameters, online production and product information as well as a complete process file for the supervisor.
- 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 60 mm (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 the ASCO packaging machines APM120 and APM140.



Automatic Dry Ice Reformer A700Ri: Options

Pos. 001

Podium for Dry Ice Pelletizer

Customized podium to elevate a dry ice pelletizer to directly charge the ASCO Dry Ice-Reformer A700Ri with pellets.

part no. 4063845



Pos. 002

ASCO Pellet Feeder for Dry Ice Reformer A700Ri

Conveyor to feed the ASCO Dry Ice Reformer A700Ri with pellets from a dry ice pelletizer.

part no. 4063846



Pos. 003

Set of spares

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

part no. 4063494



Sample image

