

# Dry Ice Production

## Dry Ice Reformer A700R

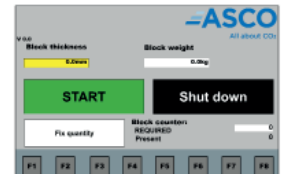
part no. 900570



The **Dry Ice Reformer A700R** has been completely revised to optimise the production of 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 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

Dimensions (L × W × H):	1'140 × 1'140 × 1'620 mm (44.88 x 44.88 x 637.87 in)
Weight net:	approx. 510 kg (1124.4 lbs) (without hydraulic oil) approx. 580 kg (1278.68 lbs) (with hydraulic oil)
Voltage:	400 Vac / 50 Hz / 3Ph + PE (other voltages on request)
Total power installed:	9.5 kW
Max. average power consumption:	< 3 kW
Standby mode:	0.6 kW
Basis media:	3 mm (1/8 in) dry ice pellets
Dry ice density blocks:	≥ 1.54 kg/dm <sup>3</sup> (96.14 lb/ft <sup>3</sup> )
Standard block/slice sizes:	210 × 125 mm (8.3 x 4.92 in), thickness 16 to 60 mm (5/8 to 2.36 in) resp. weight 650 to 2'430 g (1.43 to 5.36 lbs) (thickness and weight stepless adjustable)
Production capacity*:	200 to 700 kg/hr (440 - 1543.24 lbs) (depending on block size)

	Standard block /slice size 210 × 125 mm (8.27 x 4.92 in)									
Thickness in mm** (Thickness in in)	16 (0.6)	18 (0.7)	20 (0.8)	22 (0.9)	25 (1)	30 (1.2)	40 (1.6)	50 (2)	60 (2.4)	
Weight in g/block approx. (Weight in lbs/block approx)	650 (1.4)	730 (1.6)	810 (1.8)	890 (2)	1'010 (2.2)	1'220 (2.7)	1'620 (3.6)	2'030 (4.5)	2'430 (5.4)	
Performance in kg/hr approx. (Performance in lbs/hr approx)	200 (440.9)	220 (485)	240 (529)	260 (573.2)	300 (661.4)	360 (793.7)	480 (1'058)	600 (1'322.8)	700 (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.

## Function and Applications of Dry Ice Reformer A700R:

The Dry Ice Reformer A700R 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 in) 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 A700R's PLC.

## Key Features of Dry Ice Reformer A700R:

- **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"** - with different access levels and information regarding the started production.
- **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 (0.63 to 2.4 in) resp. 650 to 2'430 g (1.43 to 5.36 lbs). Corresponding calculation happens automatically.
- **Integrated block thickness control** - differing block thicknesses (e.g. if too little dry ice pellets are in the hopper) can be displayed on the touchscreen and on a separate digital output.
- **High process reliability** - optimal process monitoring provides optimal performance and high process reliability.

## Options for Automatic Dry Ice Reformer A700R:

Pos. 001

### ASCO Passive Saw for Dry Ice Reformer A700R

Passiv saw to divide dry ice blocks up to 25 mm (0.98 in) thickness Consisting of: Conveyor belt and one saw blade to cut the blocks into two Power connection: 400V/50Hz"

part no. 900721



Pos. 002

### Spare blade incl. holder for passive saw

Allows the integration of a second blade to divide the dry ice slice into three pieces

part no. 4062692

Pos. 003

### Podium for Dry Ice Pelletizer

Customized podium to elevate a dry ice pelletizer to directly charge the ASCO Dry Ice-Reformer A700R with pellets



Pos. 004

### ASCO Pellet Feeder for Dry Ice Reformer A700R

Z-Conveyor to feed the Dry Ice Reformer A700R with pellets from a dry ice pelletizer

