PENTAIR UNION ENGINEERING

CO_2 DRY ICE PRESS

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Dry ice is CO_2 in solid form with a temperature of -78°C at atmospheric pressure. Heated dry ice sublimates from its solid to its gaseous phase without leaving any residues and is thereby a dry and clean alternative to conventional water ice cooling.

Dry ice produced in the Pentair Union Engineering Dry Ice Press (DIP 0200) is used for many different applications.

Dry ice has a high reserve of cooling capacity, which makes it a reliable and most econo-mic cooling medium for refrigerated and frozen transport. Catering, pharmaceutical and chemical industries frequently make use of dry ice.

Pentair Union Engineering supplies standard dry ice plants as well as customized plants to meet specific customer requirements. The Dry Ice Press is hydraulically operated and is supplied with a snow tower for continuous production of dry ice snow, press matrices, operator panel, as well as a heat exchanger for sub-cooling liquid CO_2.

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SPECIFICATION

Dry Ice:

Capacity:	Blocks:	200 kg/h by max. sizes
	Slices:	150 kg/h by min. sizes (approx.)
	Pellets:	100 kg/h (approx.)
Dimensions (W x H x L):	105 x 125 x (25, 50, 75, 100, 125, 150) mm	
Weight, slices or blocks:	0.5 - 1.0 - 1.5 - 2.0 - 2.5 - 3.0 kg	
Pellet dimension:	Ø 15 mm	
Weight, pellets:	10 - 20 grams	
Density:	1500 kg/m3	

Input to the Dry Ice Press – Consumption's:

CO_2 liquid flow:	430 kg/h (approx.)
CO_2 liquid pressure:	13 - 15 bar(g)
CO_2 liquid temperature:	-32 / -27°C
Power consumption:	max. 7 kW

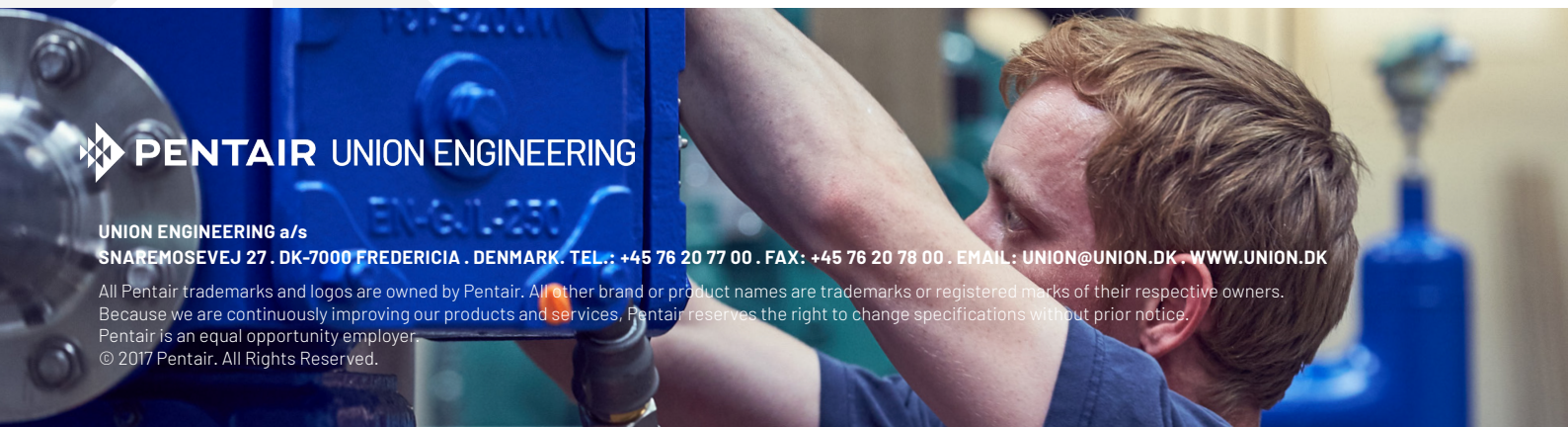
CO_2 return gas:

Return gas flow:	180 / 200 kg/h by max. sizes (approx.)
Return gas pressure:	0.1 bar(g) (approx.)
Return gas temperature:	-50°C (approx.)

OPTIONS

CO_2 Return Gas Recovery Equipment
During the expansion of liquid CO_2 in the snow tower, approximately 50% of the liquid CO_2 is transformed into flash gas.
Complete CO_2 recovery systems, as well as retrofit equipment – which makes it possible for existing CO_2 recovery and generating plants to utilize the return gas from the dry ice press can be supplied according to customer specifications.

Dry Ice Boxes
Fibreglass dry ice storage boxes equipped with 4 wheels (rolls) and id plate. Boxes are available with capacities between 30 and 600 litres.



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