



Air Products' CRYO-ROTARY uses liquid nitrogen at -196°C for fast economic chilling or freezing of diced foods such as raw meat, cooked meat and vegetables delivering a high quality, totally IQF product. The CRYO-ROTARY can produce a variable throughput of upto 3 tonnes/hour depending on the tunnel size and product freezing characteristics, yet requires a minimum of space.



AN EFFICIENT PROCESS

The CRYO-ROTARY is a double skinned insulated cylindrical tunnel fabricated from food grade stainless steel. Food products are conveyed by a variable speed belt into the tunnel which is cooled by the powerful and pure refrigeration of liquid nitrogen. The inclination and rotating motion tumbles the product through the drum, from where, having reached the desired temperature it exits ready for further processing. Tunnel temperature and cold gas flow are automatically controlled using a high sensitivity microprocessor control system for easy and economic operation. Exhaust nitrogen gas is discharged from the unit via a fan assisted exhaust system.

MAXIMUM YIELD WITH HIGH QUALITY IQF

The constant motion of the CRYO-ROTARY during the freezing process prevents product stickage

and results in an output that is 100% IQF even with food of high water content. The CRYO-ROTARY produces a free flowing product, even when the food has a sauce coating. No loss of product through the belt is experienced even with small pieces.

EASY TO CLEAN AND HYGIENE

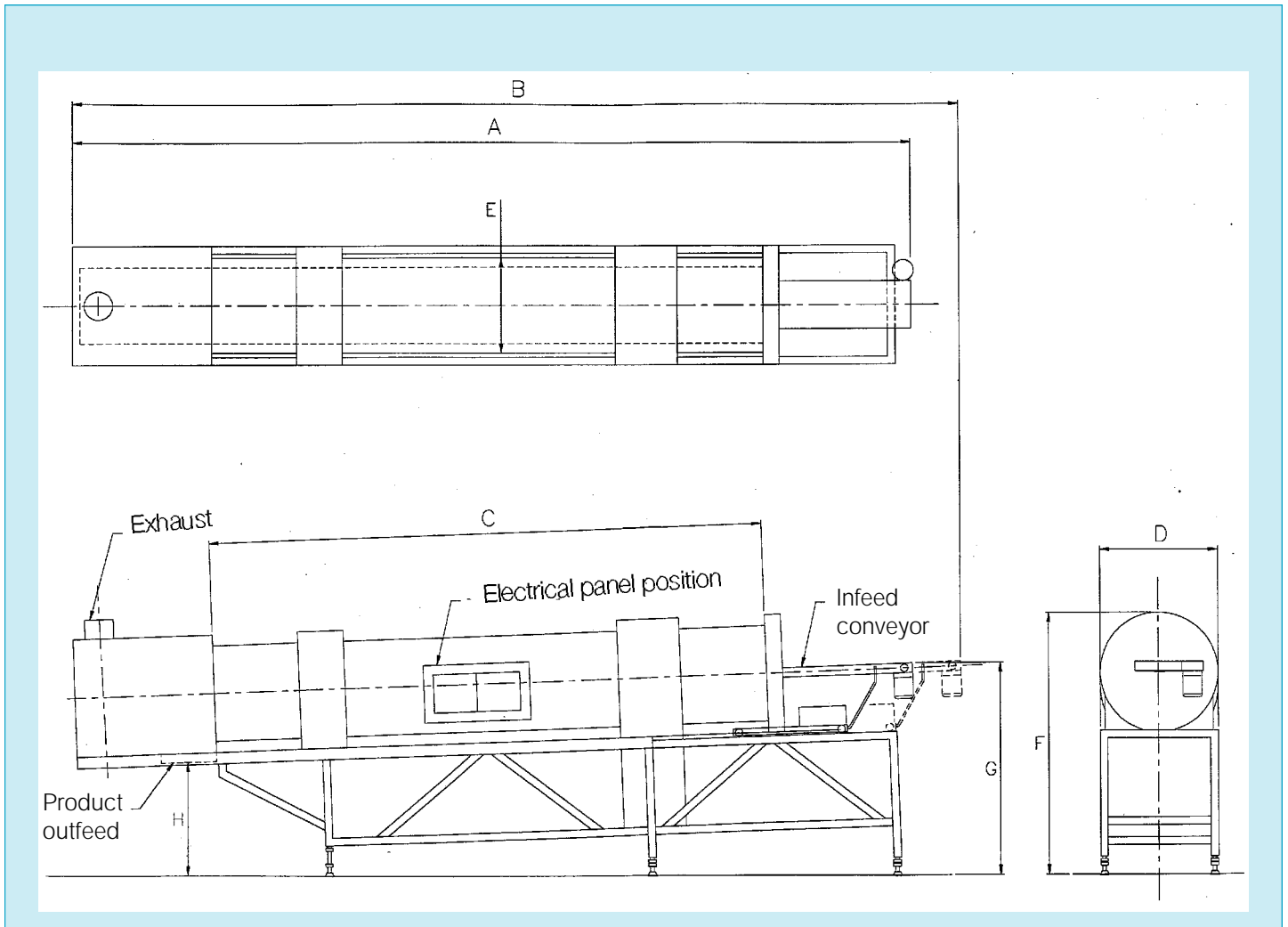
The smooth internal surface design of the CRYO-ROTARY, and the initial crust freezing combined with the action of the product flow work together to prevent product build up within the equipment. The inlet and outlet sections open up to provide full access for cleaning. With the addition of water/hygiene solution the tunnel is self cleaning as the inclination and rotating movement produce a highly effective agitation. CIP ("clean in place") options are also available to further automate and simplify cleaning.

HIGH THROUGHPUT FROM A COMPACT MACHINE

The design of the CRYO-ROTARY produces a high throughput whilst occupying a relatively small area. By comparison the freezing capacity per m^3 of floor space is significantly higher than even other liquid nitrogen systems and, an even higher increase throughput can be achieved by increasing the tunnel diameter as opposed to the length.

EFFICIENT AND COST EFFECTIVE

Regardless of the CRYO-ROTARY's freezing capability its liquid nitrogen to product ratio makes it a highly efficient and effective freezing method. The size and simple construction of the CRYO-ROTARY combined with easy installation and maintenance ensures that costs are kept to a minimum.



Model number	Overall Length 'A'	Access Length 'B'	Effective Length 'C'	Overall Width 'D'	Barrel Width 'E'	Height 'F'	Loading Height 'G'	Outfeed Height 'H'	3 phase electric supply kW total	Approx Weight kg
	m	m	m	m	mm	m	m	mm		
CR800.4	6.56	7.06	4	1.25	800	2.48	1.88	900	6	3500
CR800.6	8.56	9.06	6	1.25	800	2.55	1.95	900	6	4500
CR800.8	10.56	11.06	8	1.25	800	2.63	2.03	900	8	5500
CR800.10	12.56	13.06	10	1.25	800	2.70	2.10	900	8	6500
CR1200.6	8.56	9.06	6	1.65	1200	2.95	2.15	900	8	6500
CR1200.8	10.56	11.06	8	1.65	1200	3.03	2.23	900	8	8000
CR1200.10	12.56	13.06	10	1.65	1200	3.10	2.30	900	8	9500

Services: Pneumatic Air Supply: 22 psig/1.5 barg

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