



The CRYO-STREAM™ TUNNEL has been specifically designed to freeze liquids and pastes. The tunnel offers all the advantages of cryogenic freezing processes and is a further development of the successful Cryo-Stream™ Drum, but offers higher production rates and greater flexibility. The frozen product can take the form of pellets, beads, nuggets, sheets, strands; in fact any shape or size that can be deposited on the belt.

THE EQUIPMENT

The CRYO-STREAM™ TUNNEL is simply a conveyor passing through an insulated enclosure into which a controlled amount of liquid nitrogen is sprayed. The difference between the CRYO-STREAM TUNNEL and a standard nitrogen tunnel freezer is that the conveyor is made of stainless steel sheet rather than a mesh belt. This means that the tunnel can freeze liquids that would otherwise pass through the belt. It can also freeze solids and semi-solids, such as ice cream, where a perfectly flat lower surface is required. The CRYO-STREAM TUNNEL can be manufactured in a range of sizes to give freezing capacities of up to 2 tonnes per hour depending on the product to be frozen. The speed of the conveyor and the temperature of the tunnel can be readily adjusted to match exact production requirements in the most economic way. The tunnel fits naturally with flowline production, so handling of the product is reduced to a minimum. Its high freezing capacity means that it needs little floor space and its high efficiency and low capital cost

mean that overall operating costs are very much less than some alternative methods of freezing liquids.

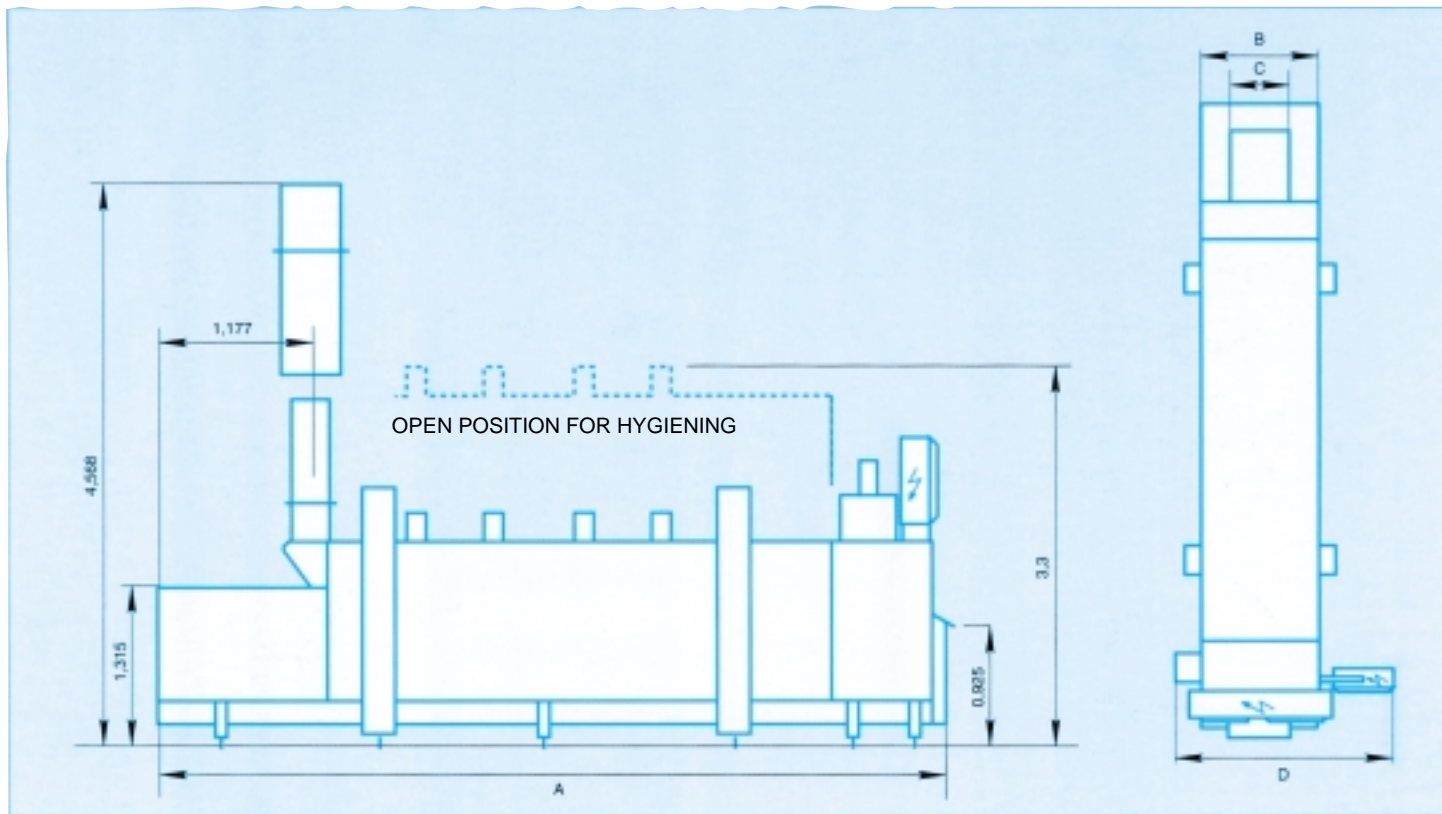
THE PRODUCT QUALITY

All frozen products benefit from the well-known advantages of rapid freezing by liquid nitrogen. These include preservation of the texture of the food and reduced dehydration. Liquids can be frozen into pellets or beads which then give a free flowing product that is easy to handle. Examples are dairy products, sauces, purees and flavourings which can then be used directly or incorporated into other products.

The applications are not confined to food; for example it can be used to freeze biological cultures which benefit from the reduced freezing time, or to freeze liquids which are to be subsequently freeze-dried. There are numerous other applications in the chemical and pharmaceutical industries where a cold free-flowing product improves downstream handling.

THE SERVICE

The CRYO-STREAM TUNNEL requires little maintenance but it is backed up by the international Air Products group. The company supplies industrial gases, cryogenic process equipment, engineering services, chemicals and construction services to world wide markets.



TYPE	ELECTRICAL POWER SUPPLY kW	A m	B m	C m	D m
4 x 0,60	13	6,3	1,17	0,58	2,43
6 x 0,60	15	8,3	1,17	0,58	2,43
8 x 0,60	17	10,3	1,17	0,58	2,43
10 x 0,60	19	12,3	1,17	0,58	2,43
12 x 0,60	21	14,3	1,17	0,58	2,43
4 x 0,60	13	6,3	1,37	0,78	2,63
6 x 0,60	15	8,3	1,37	0,78	2,63
8 x 0,60	17	10,3	1,37	0,78	2,63
10 x 0,60	19	12,3	1,37	0,78	2,63
12 x 0,60	21	14,3	1,37	0,78	2,63
4 x 0,60	13	6,3	1,57	0,98	2,83
6 x 0,60	15	8,3	1,57	0,98	2,83
8 x 0,60	17	10,3	1,57	0,98	2,83
10 x 0,60	19	12,3	1,57	0,98	2,83
12 x 0,60	21	14,3	1,57	0,98	2,83
4 x 0,60	13	6,3	1,77	1,18	3,03
6 x 0,60	15	8,3	1,7	1,18	3,03
8 x 0,60	17	10,3	1,77	1,18	3,03
10 x 0,60	19	12,3	1,77	1,18	3,03

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