



The Air Products CRYO-BATCH unit uses the unique qualities of liquid nitrogen refrigeration for fast economic chilling or freezing of foods. The CRYO-BATCH has been specifically designed to meet the stringent demands of cook-chill and cook-freeze in the catering industry. It is also ideal for food processors with batch or low volume freezing/chilling requirements.



DESCRIPTION

The CRYO-BATCH liquid nitrogen refrigeration system consists of an insulated food grade stainless steel cabinet with three custom designed turbines and liquid nitrogen (LIN) injection system.

Liquid nitrogen at -196°C is injected into the turbine generated gas stream. The super cooled gas stream passes evenly over the tray or trolley mounted containers quickly refrigerating the products. Typically the CRYO-BATCH takes 20 minutes to refrigerate 100 kg of product. Both in-out and straight through versions are available for both Multirecipe and standard.

CRYO-BATCH MULTIRECIPE

The latest microprocessor technology has been applied to provide a high performance, versatile system which is simple to use. To accommodate the variety of products you may wish to process, the CRYO-BATCH MULTIRECIPE controller can

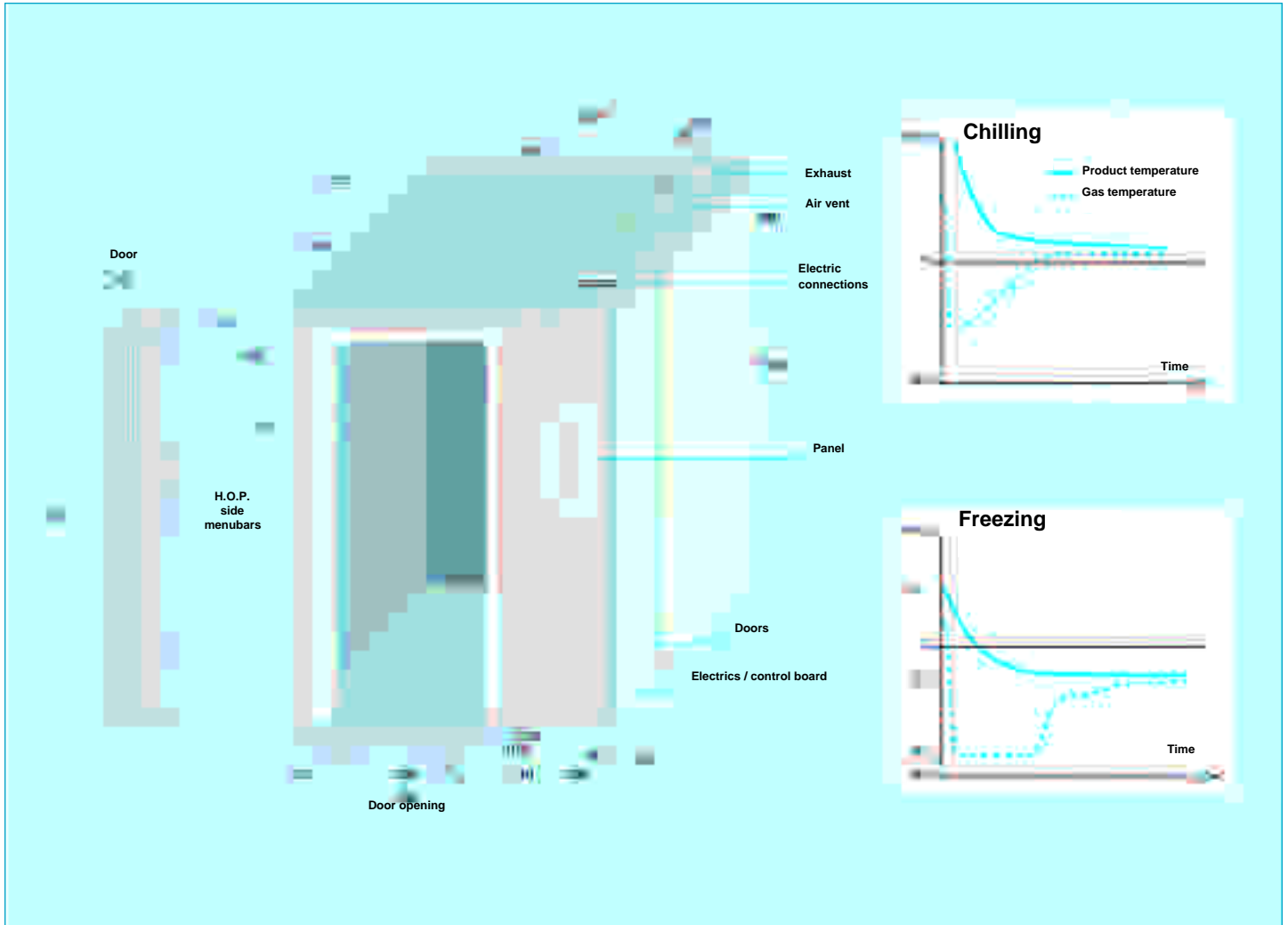
permanently store 8 freezing/chilling recipes. These recipes can be recalled at the touch of button. The recipe not only contains the normal temperature and time variables but also allows the CRYO-BATCH temperature to be varied throughout the timed recipe. In this way CRYO-BATCH performance can be matched exactly with freezing/chilling requirements and LIN consumption can be finely optimised. This feature has been developed to meet the demands of chilling sensitive products by preventing edge freezing whilst maintaining high colling rates. Air Products food group can assist your product specialists to programme the necessary recipes. Once programmed the CRYO-BATCH can be operated by your normal process staff. Information updates of process time remaining and batch temperature are displayed alpha-numerically.

CRYO-BATCH STANDARD

If the requirement is for continuous processing of a single product, the CRYO-BATCH STANDARD has been manufactured with simplicity in mind. The CRYO-BATCH STANDARD features the same turbines and LIN injection system as the CRYO-BATCH MULTIRECIPE except that the temperature and process time are manually set. To maximise efficiency a separate time controlling the LIN injection time has been incorporated allowing residual cold to be transferred to the product.

STANDARD SYSTEMS

The CRYO-BATCH has been designed to accept industry standard trolleys eg. CIDELCEM RX 17 range, EURONORM and GASTRONORM.



	INTERIOR DIMENSIONS	EXTERIOR DIMENSIONS
HEIGHT	1.82 m	1.920 m
WIDTH	0.75 m	1.520 m
DEPTH	1.146 m	1.353 m
VOLUME	1,9 m ³	4,0 m ³
ELECTRICAL SUPPLY VOLTAGE		3 Phase 220 V/240 V/380 V/415 V
POWER REQUIREMENT		2,4 kW
LIQUID NITROGEN SUPPLY		ø 15 mm, S.S. or CUPIPE
MAXIMUM REFRIGERATION CAPACITY		60 kW
NORMAL REFRIGERATION CAPACITY		25 kW
NOMINAL WEIGHT		600 kg
EXHAUST DETAIL		ST.ST. Ductwork ø 200 mm Connected to exterior of the building

AIR PRODUCTS PLC

Food Group
 Industrial Gas Division
 Crockford lane
 Chineham, Basingstoke
 Hants RG24 0YIP
 Tel.: +44 (1256) 706 245
 Fax: +44 (1256) 706 346