



bi freezer

New Technologies in refrigeration

IQF CONTACT FREEZER



The contact freezer features a thin polyethylene film conveyor belt.

This passes over a high efficiency aluminium plate filled with pumped ammonia or direct expansion gas .

On the upper part, inside the insulated cover, the evaporators provides a high speed air injection towards the product allowing one of the fastest and most efficient freezing processes known.



Traction system

An easy to use and fast cleaning device, the throwaway film guarantees high hygiene standards with a insignificant cost per kg of product.

Retention time, air speed and other characteristic can be easily setup with the digital control panel or with the more traditional electromechanical panel.

Particularly suitable for thin products, even in consistent weight.

Fish, meat, shrimps, sauces drops, vegetables cubes, semiliquid cream layer, PET trayed products and many others.

The bigger machine, 12 meter long by 2 meter wide, is usually capable of a production rate between 700 up to 1000 Kg/h, depending on product characteristics.



Digital Control Panel



Evaporator with fans



Product output



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Standard available sizes:

Plate measure	production rate	Refrigeration	Base Load	Electrical Power Requirements	Number of fans
12 x 2 24 m ²	400..1000 Kg	130KW	18 KW	21 KW	12
12 x 1.5 18 m ²	300..750 Kg	100KW	18 KW	21 kW	12
8 x 2 16 m ²	250..600 Kg	75 KW	9 KW	12 KW	6
8 x 1.5 12 m ²	170..400 Kg	60 KW	9 KW	12 KW	6
6 x 2 12 m ²	125..300	45 KW	9 KW	12 KW	6
6 x 1.5 9 m ²	90..220	38 KW	9 KW	12 KW	6

Refrigeration system:

Pumped ammonia or direct expansion

Gas: R404a, R507, R717

Retention time (special configurations upon request)

Plate length	12	8	6	meter
Standard 1	6 .. 15	40 .. 10	30 .. 7	minutes
Standard 2	45 .. 12	30 .. 7	22 .. 6	minutes
Standard 3	35 .. 9	25 .. 6	18 .. 5	minutes

Polyethylene film: 10-20-30 micron thickness,

Typical load: up to 500 Kg on entire plate

Power supply: 400V3Ph+N+G

Frame: Stainless steel

Plate: Aluminium, internal volume 8.6 liter/m²

Evaporator: Stainless steel and aluminium

Evaporator fin spacing: 12 mm

Fans: 1.5 KW, 14000 m³/h @ 60 Hz, Inverter driven (each)

Traction system: Adiprene rolls with inverter driver motor and gear reducer

Waste Film collector: low constant torque brushless motor on waste roll axis

Insulated Cover: single frame in fiberglass food grade gel coated, hydraulic lift system (25 cm) to allow film positioning and cleaning



Standard Control Panel



Digital Control Panel