

Omega Falling Film

Cooling of 4 water tanks which contents 5.000 ltr. water and 20.000 ltr. fish each tank

Incoming fish 40 tons on maximum +10°C

Goal: Cooling of fish from +10°C to +2°C in 1 hour (370 kW)

Nominal cooling load: 60 kW

Cooling unit:

Brand: Omega

Ice:

Ice thickness: 52 mm
Ice weight: 6.467 kg.
Ice capacity: 600 kWh
Capacity at melting: 273 kW
Melting time: 2,2 hr.
Water outcome temp.: +1°C

Dimensions 1 register (14 plates):

Plate distance: 150 mm
Width: 2150 mm
Height: 1350 mm
Length: 2000 mm
Weight: 315 kg.

Refrigerant:

Evaporating temp.: -7°C
Refrigerant: R22
System: DX
Freezing time compressor: 12 hr.
Cooling capacity: 50 kW

Tank + 80 mm isolation:

Length: 5300 mm
Width: 2370 mm
Height: 1750 mm
Volume: 17,04 m³

Plates:

Nr. of plates: 28
Dimensions plates: 1950x1250 mm (LxH)
Cooling surface: 137 m²
Evaporator content: 237 ltr.

Material:

Evaporator: nr. 1.4301 (V2A)
Wall thickness: 0,8 mm
Tank: nr. 1.4301

Pieces: 1

Compressor unit:

Brand: Bitzer
Type: 4J-13.2 (x3)
Total capacity: 105,6 kW at -10°C/+35°C
Including: - On steel base frame
- Liquid receiver, 142 ltr.
Sizes: 3100x800x1880 mm (LxWxH)
Pieces: 1 unit consisting of 3 compressors

- Pressure safety switches
- Control panel

Condenser:

Brand: Profroid
Type: SO90 2MSE 6V
Capacity: 255 kW
Nr. of fans: 2
Info fans: 1,8 kW / 910 RPM / Ø 900 mm
Air flow: 56.470 m³/h
Sizes: 5000x1700x1450 mm (LxWxH)
Pieces: 1

Including:

- Control panel including all necessary regulations and relais for Omega cooling unit, compressor units and condenser
- Pumps for Omega Cooling unit



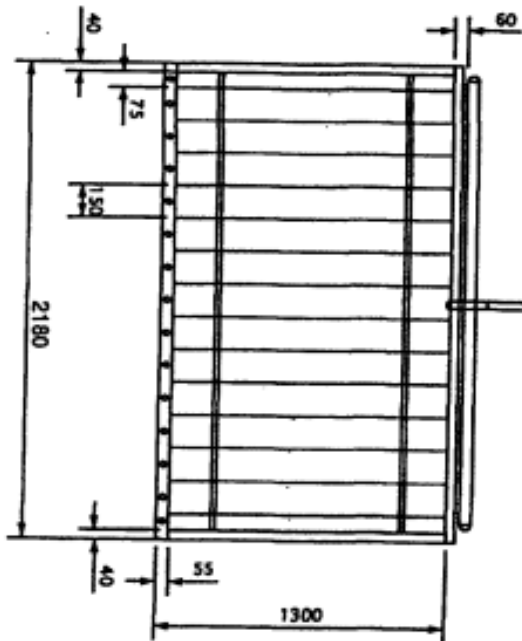
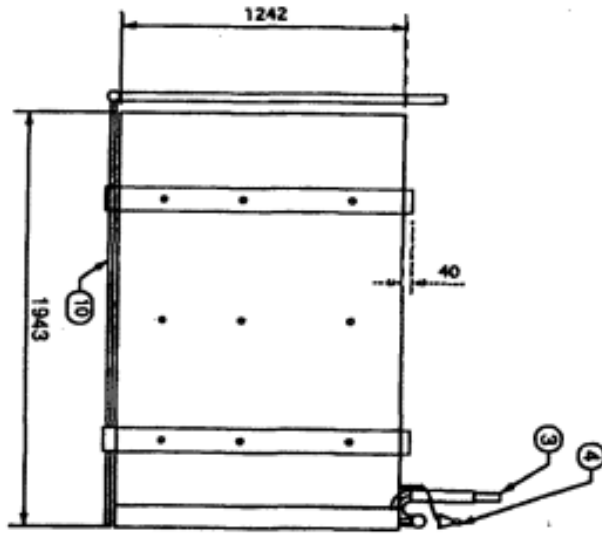






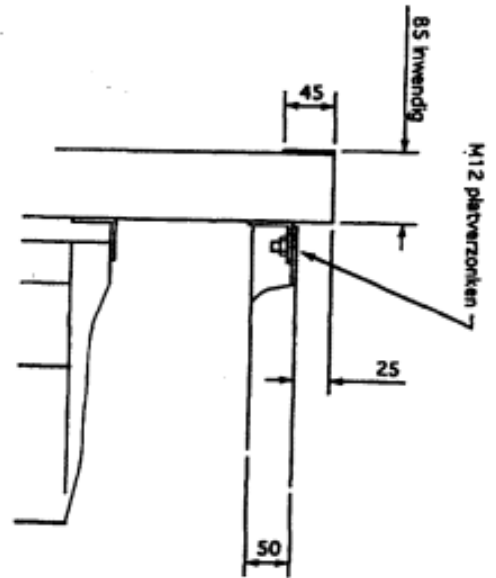
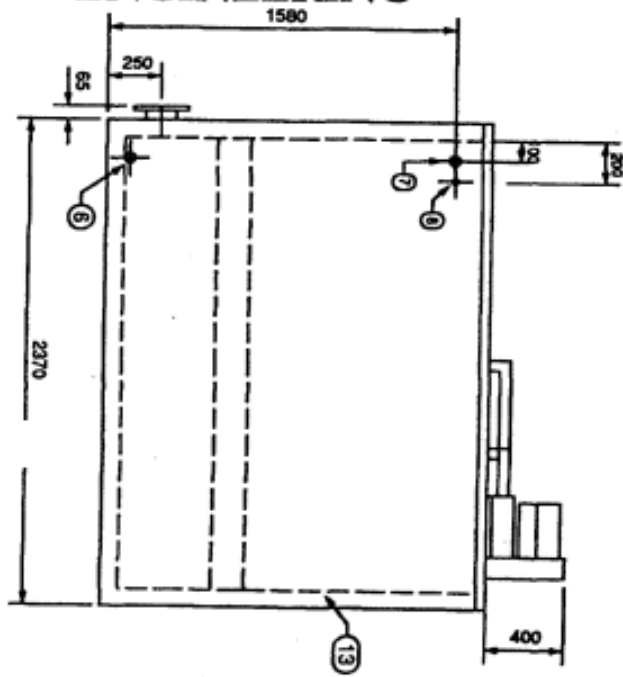
13	12	ISOLATIE: FLOOR-WALLMATE	80	304	DOW.
12	4	POLYCARBONAAT DEKSEL	-	PC	-
11	1	RVS-DEKSEL	2200 X 750	304	-
10	30	LUCHT LEIDING	Ø18 X 2000	304	-
9	1	LUCHTPOMP: 80 KSHR	30 SH 1,1KW	-	FPZ
8	1	MANE UP	Ø 3W" 26.7MM	304	-
7	1	OVERFLOW	Ø 1 1/2" 41,3 MM	304	-
6	1	DRAIN	Ø 1 1/2" 41,3 MM	304	-
5	2	POMPAANSLUITING FLENS	DN 57/8 Ø130,7	304	NW 125 MD10
4	2	VLOERSTOF LEIDING	172 X 1685 X 2,5	CU	-
3	2	ZUIGLEIDING	1 3/8" 34,9 MM	CU	U-15065
2	28	PELLOWPLATE	1890 X 1250	304	-
1	1	BAK	2370 X5300 X 1750	304	-
Sluiter Jaarw		BEWAKING		AFMETINGEN	MAT: OPENENKING
PROJECT	Grenco	OMEGA engineering			
ORDER	E 0114 B	nuwouden 80 Eindhoven			
L.A.V.	Dir. Zwerenburg	NL 005-281818 Fax 005-281819			
REF.		GRENCO GRONINGEN 600 KWH			
Getaland	Han ten Sthof	A	28 X 1,25 X1 92	DWG NO. YB R22 50KW	REV
Datum	11 FEB. 1993	SCALE	1/20	GEWICHT	SHEET 1

OMEGA ENGINEERING



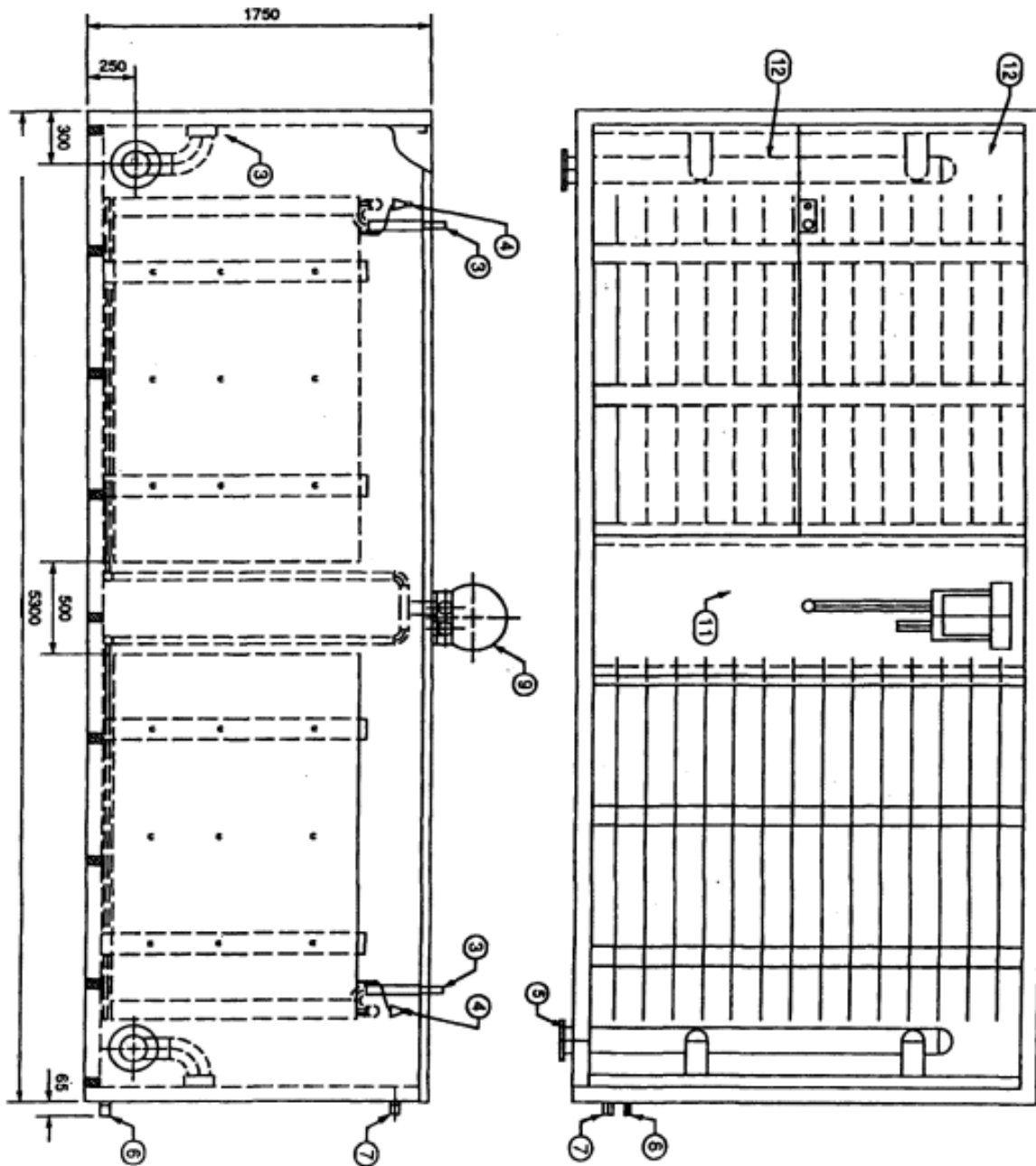
Manufacturers of pillow plate panels, falling film chillers, icebanks and tanks for food, dairy, beverage, pharmaceutical, chemical, meat, seafood and industrial applications.

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