

OMEGA

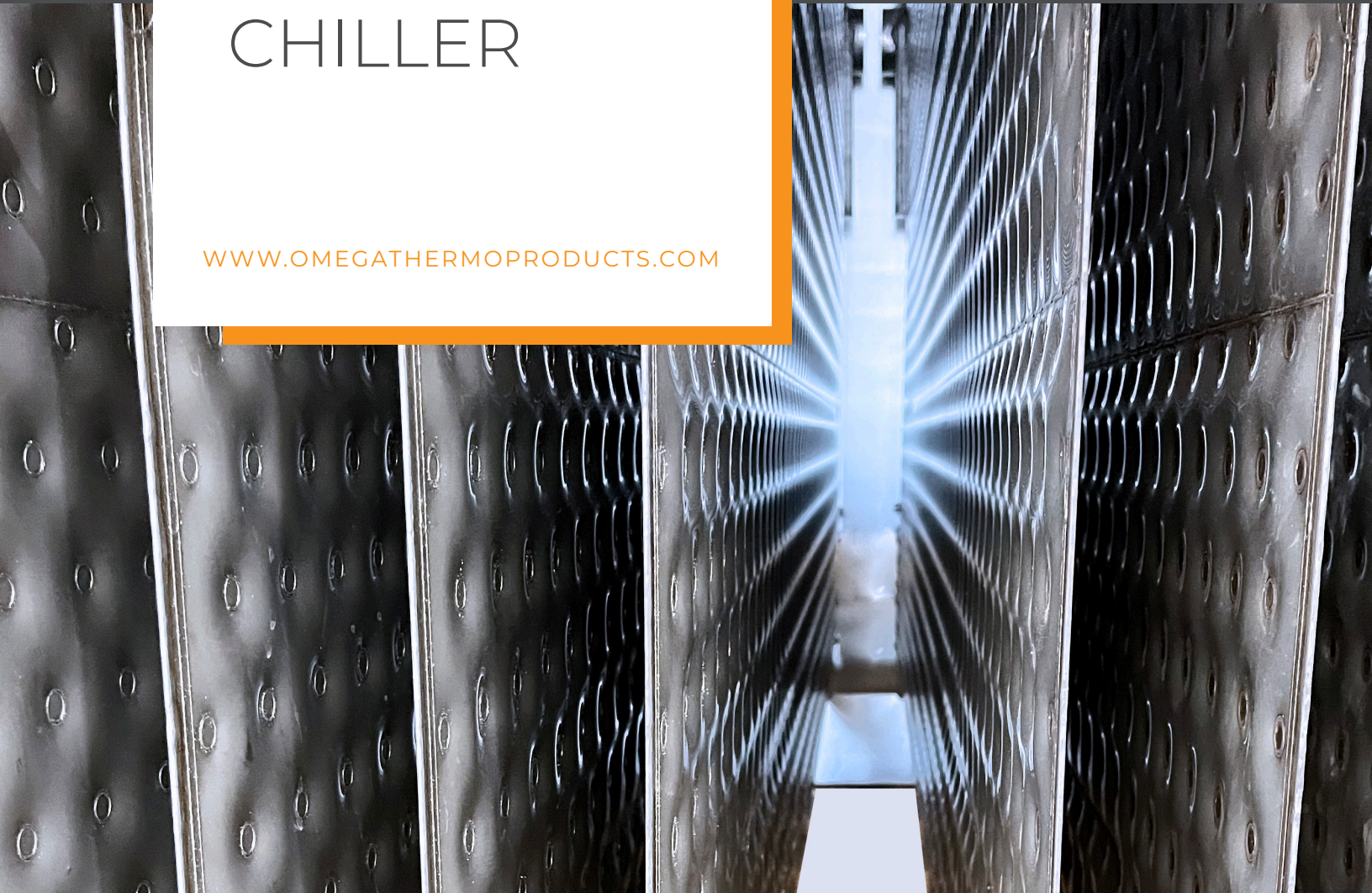


THERMO PRODUCTS

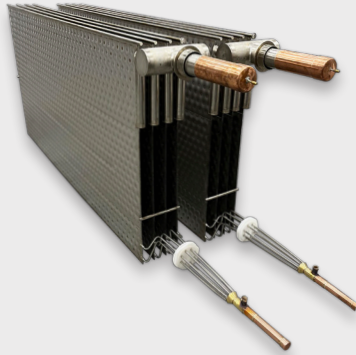
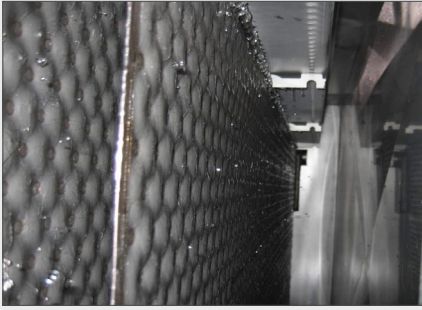
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# FALLING FILM CHILLER

[WWW.OMEGATHERMOPRODUCTS.COM](http://WWW.OMEGATHERMOPRODUCTS.COM)



LEADING IN HEAT TRANSFER TECHNOLOGY



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## COOLING FLUIDS WITHIN 1°F OF THEIR FREEZING POINT

### Applications

Seafood

Poultry applications

Milk cooling and cheese  
production

Washing and cooling produce

Ingredient water in bakery  
applications

Meat processing industry

Fish processing industry

The Omega Falling Film Chiller is suitable for cooling fluids to within 1°F of their freezing point. The chiller transfers heat from a thin layer of liquid filming on the outside of the pillow plates, while the refrigerant is passing through the inside of the plate.

The Omega Falling Film Chiller distribution pan can be easily cleaned due to the open concept construction and space between the evaporator plates.

Fully constructed of stainless steel, the chiller and tank section are available in 304 / 316L.

Typical cooling media for Omega chillers are CO<sub>2</sub>, Ammonia, Freon and Glycols.

### When to choose an Omega Falling Film Chiller?

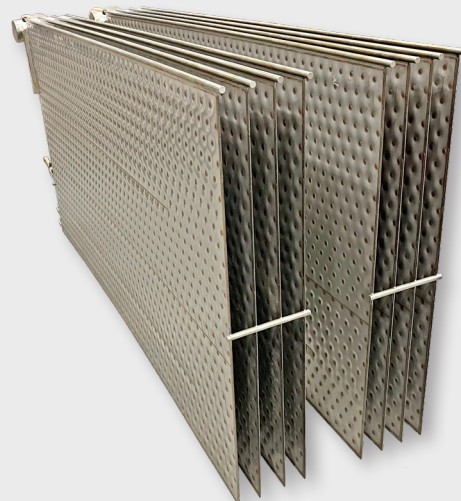
- › Suitable for cooling fluids down to 1°F of freezing point without the risk of damage due to ice build-up
- › Maintain a constant temperature of the chilled fluid
- › Open construction for easy access and maintenance
- › Complete stainless steel construction
- › Falling Film Chillers are design specifically to the application and capacity required

### Laser Welded Plates

All Omega chillers come with high efficiency evaporator banks constructed with CNC Laser Welded plate technology. The CNC precision of Laser Welding has two major advantages over conventional resistance welding;

1) Versatility – Our CNC welder allows us to design our plates to best suit their application with no restraints on creativity,

2) Consistency – Programmed CNC Laser Welding insures that each plate is welded identical to the next, this provides optimal refrigerant distribution for achieving even performance within the plate bank.



## Distribution System

Omega has developed an innovative distribution system that allows optimum filming of fluids over the evaporator plates. Integrated into this system is an overflow feature, allowing excess fluids to be bypassed through the chiller without disturbing the filming process.

## Split Cabinet Design

The Omega Chiller utilizes a two piece construction with a separate upper cabinet and lower fluid tank. This unique design allows customers the versatility of direct attachment designs. All Omega chillers and tanks are constructed of stainless steel and other FDA approved materials.

## Filming Technology

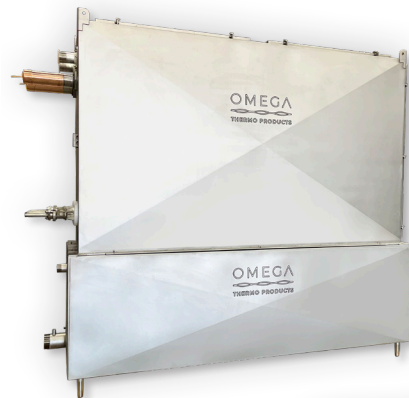
The Omega Falling Film Chiller is designed for process cooling applications of all kinds. The rapid fluid cooling ability of filming technology allows fluids to be quickly cooled to temperatures near their freezing points.

## Manifolding

All manifolding is contained inside the chiller cabinet. For ease of refrigeration field piping, the liquid and suction connections are located outside of the chiller cabinet. Manifolding is available for DX, flooded, recirculated, and glycol applications. All evaporator banks are designed and built to meet IIR-2/ASHRAE 15 Standards.

## Cleanability

The water distribution pan includes a removable plug for flushing debris from the pan. The water distribution tube also has access for cleaning.



## Specifications

### Standard Upper Cabinet Sizes

The following covers overall dimensions, weights, plate sizes, and capacities for standard upper cabinets. Cabinet dimensions given represent extreme measurements of cabinets. The dimensions below do not include processing piping.

PLATE SIZE	CABINET PLATE CAPACITY		CABINET DIMENSIONS (inches)			CABINET WEIGHT (lbs.)
	MIN.	MAX.	WIDTH	LENGTH	HEIGHT	
3 x 5	1	2	11	72	48	266
3 x 5	2	4	25	73	58	370
3 x 5	2	8	37	73	58	435
4 x 8	2	8	37	112	70	654
4 x 8	2	10	43	112	70	700
4 x 8	2	12	49	112	70	740
4 x 8	4	16	73	112	70	1,245
4 x 8	4	24	97	112	70	1,500
Custom chiller sizes available upon request						

Standard cabinets and tanks are constructed of 304ss and glass bead finish, other material types are available. For applications feeding two separate processes, divided cabinets and tanks are an option.

### Standard Lower Tank Sizes

The following charts contain the dimensional size and capacities of standards size tanks.

PLATE SIZE	PLATE CAPACITY		TANK DIMENSIONS (inches)			EMPTY WEIGHT (lbs.)	FLUID VOLUME (gal.)	FULL WEIGHT (lbs.)
	MIN.	MAX.	WIDTH	LENGTH	HEIGHT			
3 x 5	1	2	26	74	29	325	75	950
3 x 5	2	4	26	74	40	360	160	1,700
3 x 5	2	8	38	74	40	500	240	2,500
4 x 8	2	8	38	113	40	710	375	3,850
4 x 8	2	10	44	113	40	750	425	4,300
4 x 8	2	12	50	113	40	1,130	500	5,300
4 x 8	4	16	74	113	48	2,850	835	9,825
4 x 8	4	24	99	113	52	3,100	1,264	13,650
Custom tank sizes available upon request								

A complete Falling Film Chiller manual with technical information and drawings is available upon request.

### Omega Thermo Products Certifications



ASME U-stamp, Canadian Registration Number, PED

**USA**  
 OMEGA THERMO PRODUCTS  
 212700 LASER DRIVE  
 STRATFORD, WI 54484  
 PHONE: 715.687.8102  
[OMEGA@LASER-PLATE.COM](mailto:OMEGA@LASER-PLATE.COM)

**THE NETHERLANDS**  
 OMEGA THERMO PRODUCTS  
 CHROOMSTEDEN 2  
 7547 TL ENSCHEDE  
 PHONE: +31 (0)53 851 88 00  
[INFO@OMEGATP.COM](mailto:INFO@OMEGATP.COM)

**INDIA**  
 OMEGA ICEHILL PVT. LTD.  
 805, 8TH FL. WAVE SILVER TW.  
 SECTOR-18, NOIDA - 201301 UP  
 PHONE: +91 (0)12 06 88 85 80  
[INFO@OMEGAICEHILL.CO.IN](mailto:INFO@OMEGAICEHILL.CO.IN)

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