

# Packo

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## Falling Film Chiller

### The reliable solution for instant cooling by means of ice water

In order to meet the increasing demand for continuous instant cooling of liquid food products, Packo presents the FALLING FILM CHILLER.



### Features

- › Compact design - modular from 80 kW up to 240 kW
- › No risk of freezing thanks to the production of ice water of 0.5-1°C
- › Easy to assemble on site
- › Limited floor space required
- › Light weight removable side panels for inspection and cleaning
- › No risk on condensation
- › Efficient heat transfer
- › Optimal refrigerant injection thanks to the Packo Eco-Tronic technology
- › Compressor regulation for an extended life span
- › Reliable system
- › CE-label



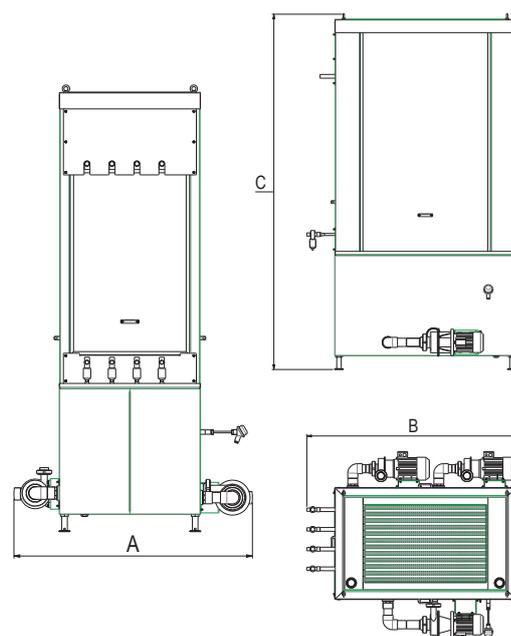
## Construction

- › The Falling Film Chiller is completely **made of stainless steel AISI304**. Only the four side panels are made out of double wall reinforced plastic. These panels are easy removable to have access to the cooling plates e.g. for inspection or cleaning purposes.
- › The Falling Film Chiller consists of **a series of stainless steel plates** arranged vertically. The required cooling capacity determines the number of plates. For each 3 plates there is a corresponding cooling unit.
- › The basic model of the Falling Film Chiller has 12 plates, so 4 cooling units to be connected.
- › Next to cooling with cooling units (R404a,...), the plates can also be cooled with an external refrigerant system such as glycol solution, ammonia,...
- › Below the plates, there is a **reservoir** split up in 2 parts: for the warmer return water and for the prepared chilled ice water.
- › The Falling Film Chiller is equipped with **minimum 2 and maximum 3 ice water pumps**: one for the internal circuit and max. two to pump the ice water to the consumer.
- › **Control box** built according to EN60204-1 and supplied separately.

## Operation

- › A thin layer of water is circulated over the plates and is cooled down to 0.5-1°C.
- › The ice water “falls down” into the right hand side of an insulated reservoir. From this reservoir, the ice water is sent with the second pump to the consumer which can be a plate heat exchanger, a cooling jacket of a cooling or processing vessel,...
- › The warmed water returns from the consumer into the left hand side of the reservoir of the Falling Film Chiller. This water is again pumped up to be circulated over the plates. The flow rate over the plates is always the same and ensures a highly efficient heat transfer.
- › The compressors will function according to the temperature difference to overcome between the return water and the ice water. This way, the chiller operates most economic.
- › The Falling Film Chiller is standard equipped with the Packo Eco-Tronic technology.
- › Via this system the amount of refrigerant is easy to adjust and the optimal amount is injected in the plates.

	Model:	PFF80	PFF120	PFF160	PFF200	PFF240
Cooling capacity	<i>kcal/hr</i>	69.050	103.576	138.102	172.628	207.153
	<i>kW</i>	80	120	160	200	240
Cooling plates	<i>Qty</i>	12	18	24	30	36
Cooling unit Eco-Cool 12	<i>Qty</i>	4	6	8	10	12
Connection pumps	<i>Qty</i>	3	3	3	3	3
A	<i>mm</i>	1450	2285	2285	3135	3135
B	<i>mm</i>	1611	1611	1611	1611	1611
C	<i>mm</i>	2704	2704	2704	2704	2704



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