

# FULLWOOD PACKO FALLING FILM CHILLER

The reliable solution for instant cooling by means of ice water



## Why using ice water ?

**Ice water** is used since many years for **cooling of food products and for process cooling in general** because ice water has the capacity to cool down large quantities of product in a short time. You can produce **large quantities of ice water of 0.5 à 1°C instantly**. For several applications, **there is no risk of freezing the product**.



## Application

Ice water, as refrigerant, is of big importance in the food and general industries.

## Advantages of the chiller

- Fast production of ice water of 0.5-1°C
- Quick cooling of the product
- Intensive cooling without risk of freezing
- Excellent heat exchange
- Allmost no maintenance required

## Range of Fullwood Packo Falling Film Chillers

Fullwood Packo can supply chillers in a range from 80 kW onwards. **The degree of finishing and supply are according to your wishes.**



## Construction

- The Falling Film Chiller is completely made of stainless steel AISI304. Only the 4 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.
- The plates can be cooled with refrigerants such as R134a, R404a, R407F, glycol, liquid ammonia,...
- Below the plates, there is a reservoir split up in 2 parts: for the warmer return water (coming from the consumer) and for the prepared chilled ice water.
- The chiller can be equipped with one of several ice water pumps.
- In case the control box is a part of the supply, the box is built according to the EN 60204-1 directives and can be supplied integrated or separately.

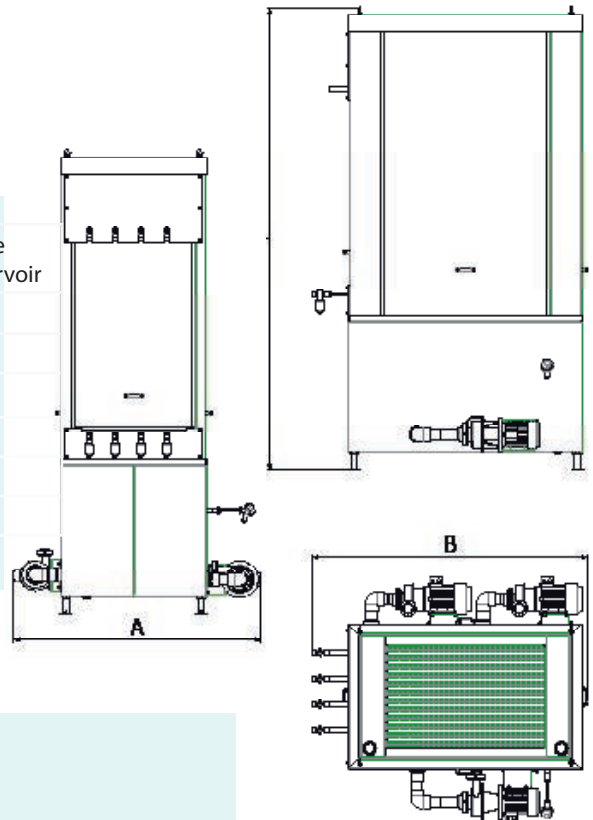
## Operation

- 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 the 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 tank, ...
- 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 cooling units 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. Through this system the amount of refrigerant is easy to adjust and the optimal quantity is injected in the plates.

## Technical data

Model	Capacity		Plates Qty	Connection pumps Qty	A mm	B mm	C mm	Volume water reservoir Litres
	kWatt	kcal/h						
<b>PFF80</b>	80	69.050	12	3	1450	1611	2704	500
<b>PFF120</b>	120	103.576	18	3	2285	1611	2704	1000
<b>PFF160</b>	160	138.102	24	3	2285	1611	2704	1000
<b>PFF200</b>	200	172.628	30	3	3135	1611	2704	1500
<b>PFF240</b>	240	207.153	36	3	3135	1611	2704	1500

For bigger capacities: data on request



## Fullwood Packo nv

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