

Falling Film Evaporators are key pieces of equipment in the Agro Industries.

Maguin Interis has a large experience in designing and providing Falling Film Evaporators (FFE) for many kinds of products.

### APPLICATIONS/PRODUCTS

- / Vinasses from Sugar Cane and Sugar Beet
- / Thin Stillage from corn, wheat and other cereals
- / Yeast cream
- / Sugar Beet juice and Sugar Cane juice
- / Alcohol and water (reboiler for distillation columns)
- / Chestnut extract and other thermo sensitive products
- / Starchy solutions

### MAIN DESIGN FEATURES

The FFE by Maguin Interis are tailor-made designed for your specific application taking into account your requirements in terms of flow, capacity, dry matter but also control of fouling, preservation of product's quality, expected quality of steam...

These requirements lead to specific specification, such as:

- / Tailored design
- / 4 to 6 000 m<sup>2</sup> heat exchange area
- / Tube length from 2 m up to 15 m
- / Spray nozzle or distribution plate
- / Vacuum or pressure operating evaporator
- / Inside or outside droplet separator
- / Carbon steel or stainless steel construction
- / Construction against EU/ASME standard



Maguin Interis offers services for lab scale studies (viscosity, non-Newtonian behavior, boiling point elevation, ....) in order to provide the best solution for your product.

## ADVANTAGES

- / Design suited to specific capacity, flow rate and dry matter
- / Design with minimum temperature to preserve product and fouling
- / Local and regional construction to reduce transportation costs

## PROCESS INTEGRATION - ENERGY EFFICIENCY

Maguin Interis is recognized for its expertise in designing efficient industrial processes. When designing FFE, we always take into account the surrounding process. Especially we can study:

- / Energy coupling with other processes, including distillation columns, rectification units, dehydration units, dryers
- / Recovery of fatal vapor by means of our range of **Chacoux® multi nozzles thermo-ejectors**
- / Integration of a mechanical vapor recompression

## COUPLING WITH DRYERS

Companies from Moret Industries Group design and manufacture **direct and indirect drying technologies operating with gas (or wood or other fuel combustion chamber) or steam driers**. Our FFE are suitable for energy recovery from wet flue gas steam generated by indirect driers. A pilot plant is available for specific tests on your product.



Chacoux® thermo-ejector

## OTHER TECHNOLOGIES

Maguin Interis can also provide other types of evaporator technologies, including forced circulation evaporators.

