

Cail & Fletcher falling film evaporator



Ideal equipment to optimize
performance and energy savings

- Easy installation
- Optimized juice distribution
- Improved thermal performance

The Cail & Fletcher falling film evaporator is designed for beet, cane sugar plants and refineries.

With more than 500 units sold, and thanks to its patented juice distribution system and high heat exchange coefficient, the Cail & Fletcher falling film evaporator is a key contributor in a global solution to save energy.

OUTSTANDING PERFORMANCE

- High heat-exchange coefficient for both beet and cane sugar plants and refinery applications thanks to its very specific and flexible design
- Low ΔT on all juices (high or low brix)
- Efficient and modular internal droplet separator system (zig-zag type)
- Reduction of effluent emission and environmental footprint

UNRIVALLED RELIABILITY

- Integrated skirt to protect the tube bundle from vibration

EASY INSTALLATION

- Cost-effective solution, short delivery time thanks to local fabrication
- Easy integration and adaptation to existing multiple effect stations (small foot-print)
- Can be installed outdoors

EASY MAINTENANCE

- Low risk of fouling and minimal juice color increase due to the short retention time
- Easy chemical and/or hydrokinetic cleaning thanks to the upper removable portion

STATE-OF-THE-ART TECHNOLOGY

- Patented and proven optimized distribution system

	Customized equipment
Total exchange surface	1,000 - 10,000 sqm
Average tube diameter	35 mm
Tube length	8 - 12 m

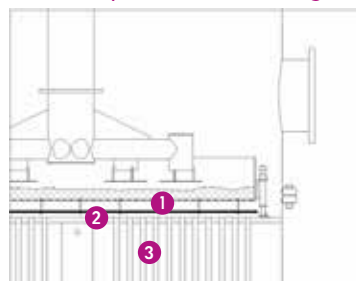
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24,000 sqm 5-effect evaporation station

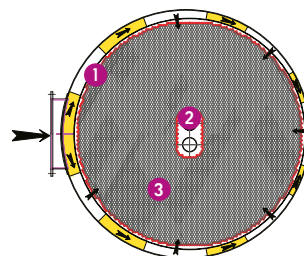
FALLING FILM EVAPORATORS

Patented juice distribution system



- 1 The flow of juice coming through the juice distribution tray holes is divided into 7 streams and directed to the surrounding distribution caps plate
- 2 Uniform juice distribution over the whole tubes perimeter
- 3 Juice distribution in a thin film on the tube walls for high efficiency

Steam distribution system during heat exchange



- 1 Skirt protects the calandria against vibration
- 2 Recovery of non-condensable gases
- 3 Offset calandria to ensure uniform steam distribution over the whole surface



4,500 sqm falling film evaporator



6,700 sqm falling film evaporator

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