



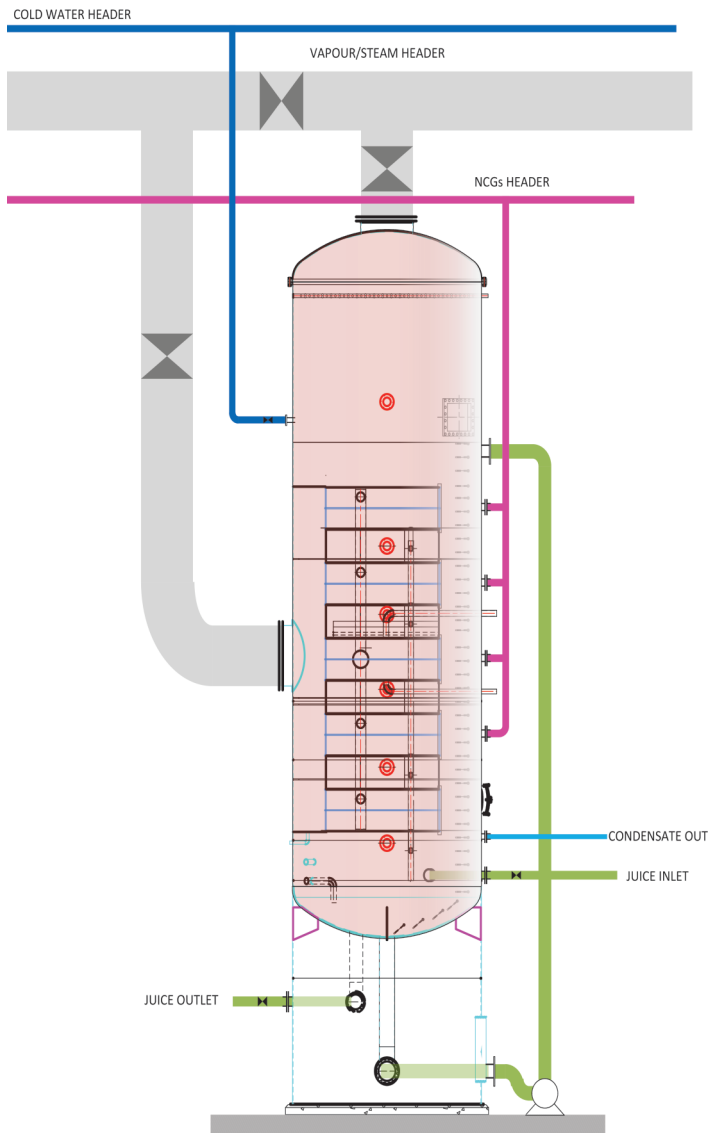
Plate Falling Film Evaporator

"Lowest ΔT (1-4°C) Operation"

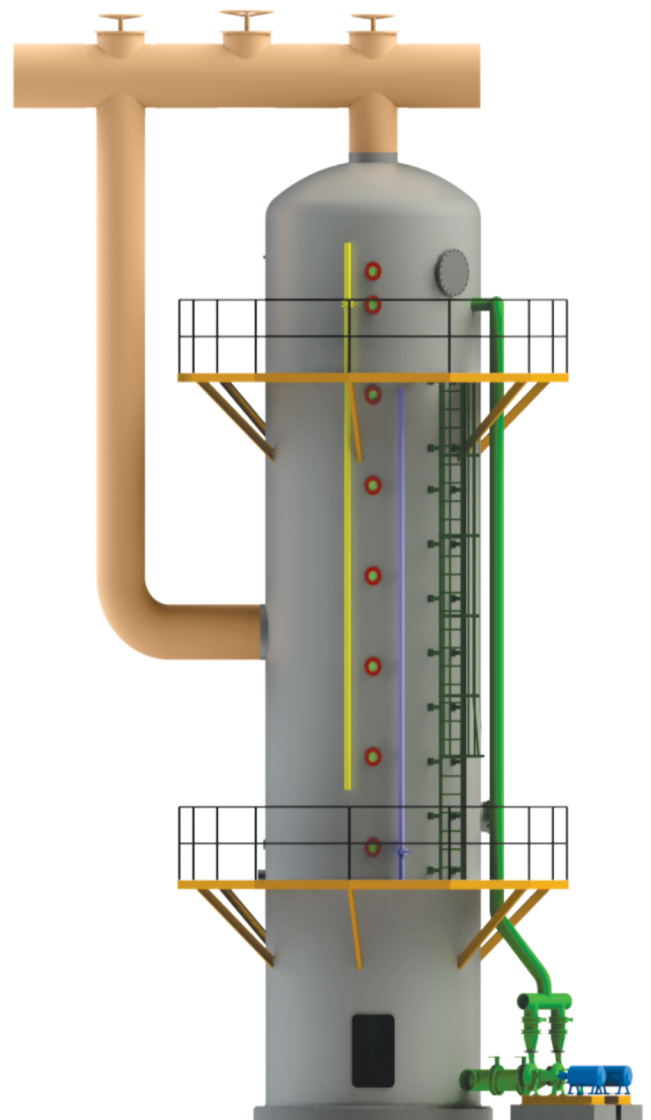
Plate falling film evaporator has lowest pressure losses and higher turbulence on liquid side to achieve highest heat transfer coefficient.

DISTINCT FEATURES:

- Lowest pinch temperature difference for minimum utility consumption.
- Highest heat transfer rate (up to $4500 \text{ W/m}^2\text{K}$).
- Offers highest energy efficiency.
- Efficient entrainment separator (More than 90% removal of $5\mu\text{m}$ size particles).
- Allows accommodation of more number of effects in given ΔT and ΔP .
- Compact and modular design.
- Distributed HS that facilitates easy operation and maintenance.
- Low thermal residence time.
- Lower inversion and low color formation.
- Low recirculation pumping requirement.
- Having experience of Designing, Manufacturing, Erecting & Successful commissioning of Standalone $10,000 \text{ m}^2$ HSA in Single Unit.
- Patented technology.

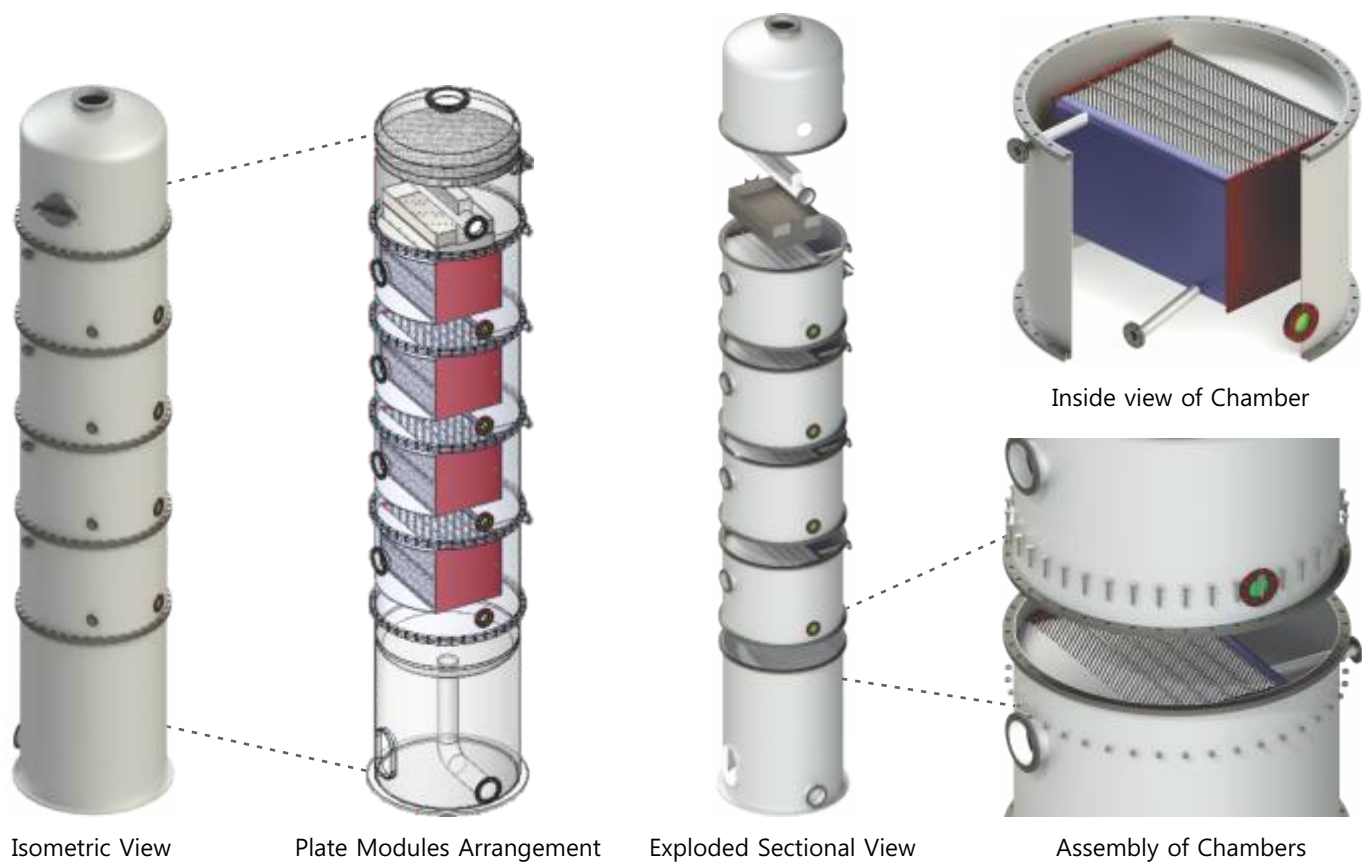


Process Flow Diagram



Isometric View

ASSEMBLY LAYOUT OF PLATE FFE :



INSTALLATIONS :



AL Khaleej Sugar Co., Dubai, UAE
(Largest PFFE of HSA 34,000 m²)



Haidergarh Chini Mills Ltd., UP
(PFFE of HSA 4,000 m²)



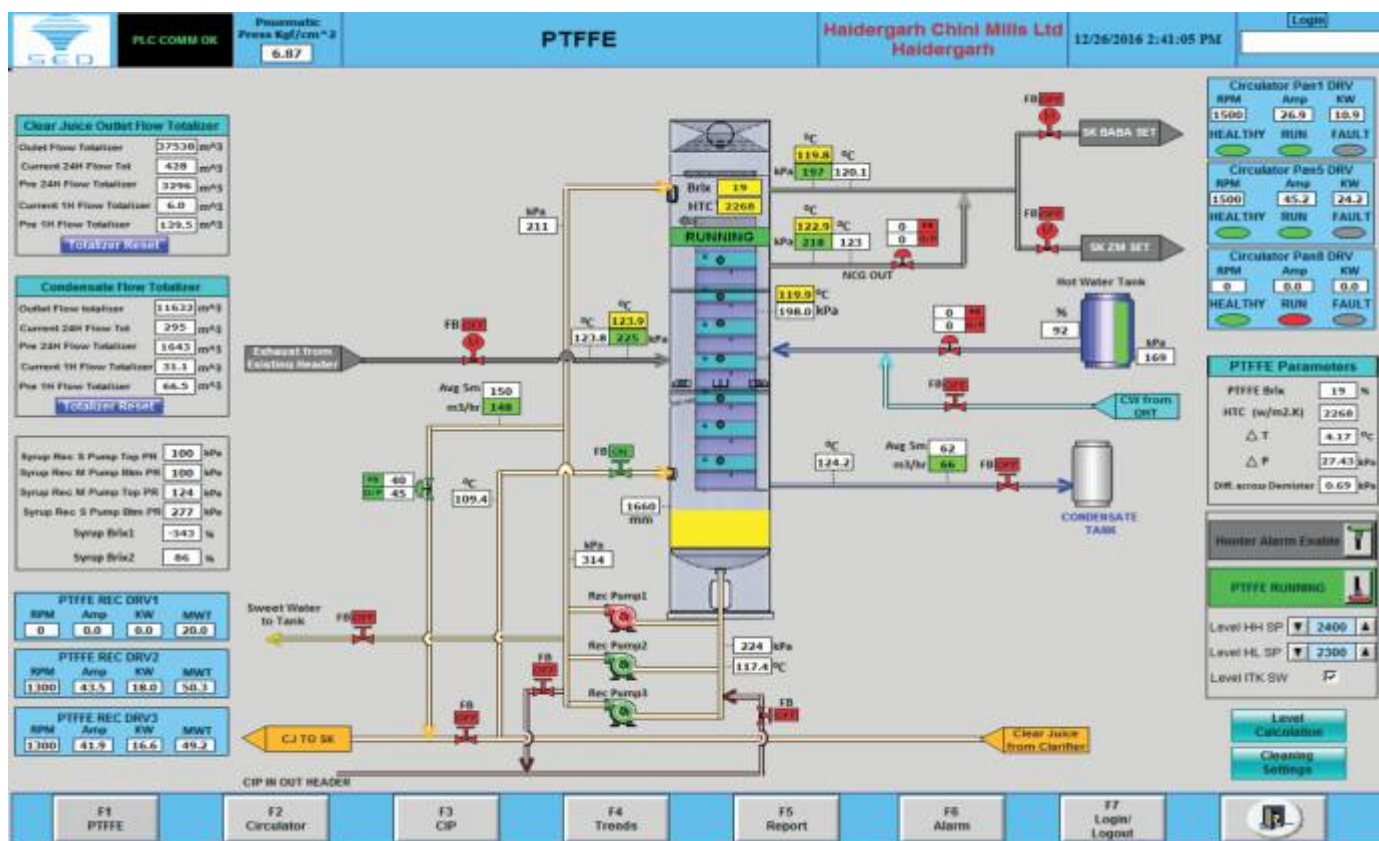
Gangakhed Sugar & Energy Ltd., Maharashtra
(PFFE of HSA 3,100 m²)

Parameters	Before	After
Capacity Utilization	6200 TPD	7000 TPD
Steam Consumption	24%	20%
Reduction in Power Consumption up to 15%.		

Parameters	Before	After
Capacity Utilization	4080 TCD	4300 TCD
Steam Consumption	47%	36%

Parameters	Before	After
Capacity Utilization	6000 TCD	8000 TCD
Steam Consumption	46%	35%

FULLY AUTOMATIC OPERATION :



REFERENCES :

Sr. No.	Project Name	Quantity	Total HSA (m ²)
INTERNATIONAL			
1.	Al-Khaleej Sugar Co., Dubai, UAE	3	34000
DOMESTIC			
1.	Vishwaraj Sugar Industries Ltd., Karnataka	5	15000
2.	Haidergarh Chini Mills Ltd., U.P.	1	4000
3.	Indian Sucrose Ltd., Punjab	4	10000
4.	Superior Food Grains, Unn, UP	3	7500
5.	Gangakhed Sugar & Energy Ltd., Maharashtra	1	3100
6.	SEDL's R&D Unit, Bidar, Karnataka	1	1500



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