



210+
Installations

Falling Film Evaporators

FFE



210+

Isgec FFE Installations all over the World

Patented
Annular Vapor
Separator

Easy
Maintenance

High
Heat Transfer

Advantages

Range: From 150m² to 10000m²

No Boiling Point Elevation

Lower ΔT

Low Residence Time

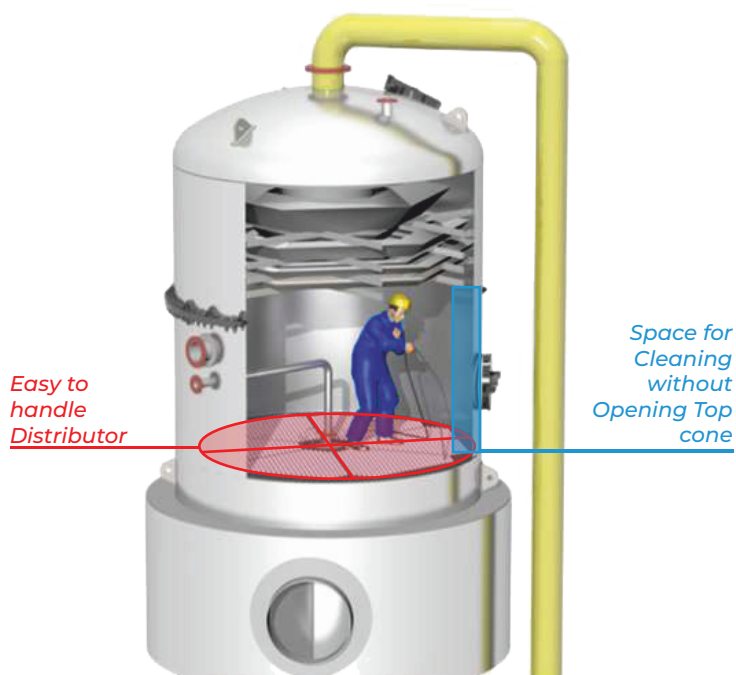
Less Colour Development

Less Inversion Losses

High OHTC



8 Nos. 5000 m² & 2 Nos. 2000m² HSA FFE at Bindal Paper Mills Ltd., U.P, India



Salient Features

Sufficient headroom over top Tube Sheet for Easy Maintenance

Maintenance-friendly 5 Stage Cascade Type Inbuilt Juice Distributor

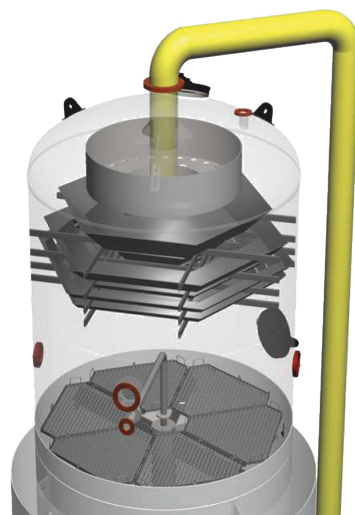
Fully Automated Operation

Mild Steel or Stainless Steel Construction

Self-supporting Structure

Top caps on each tube

Design Wetting rate 18-20 l/cm-h





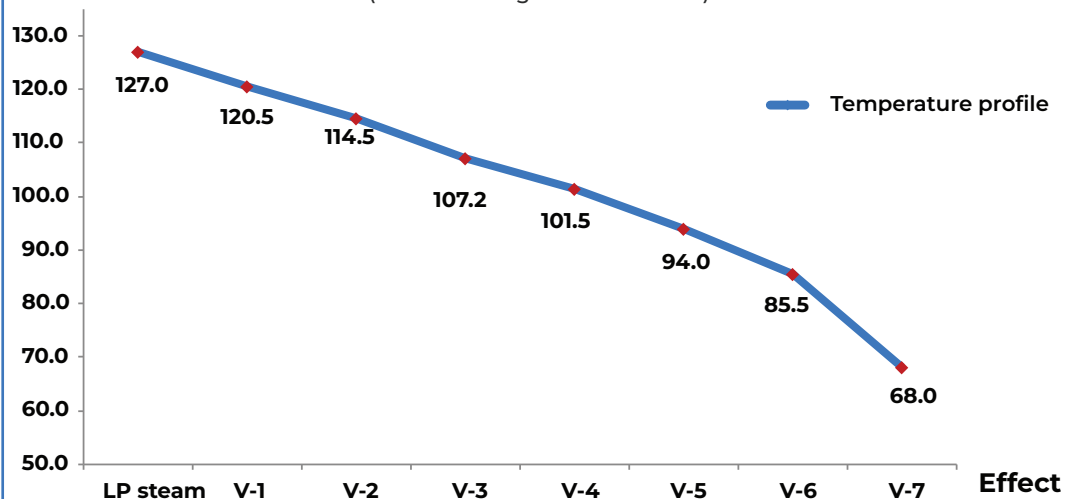
6 Nos. 5500 m² & 3 Nos. 4500 m² HSA FFE at DCM Shriram Ltd. (Loni Unit)
U.P, India



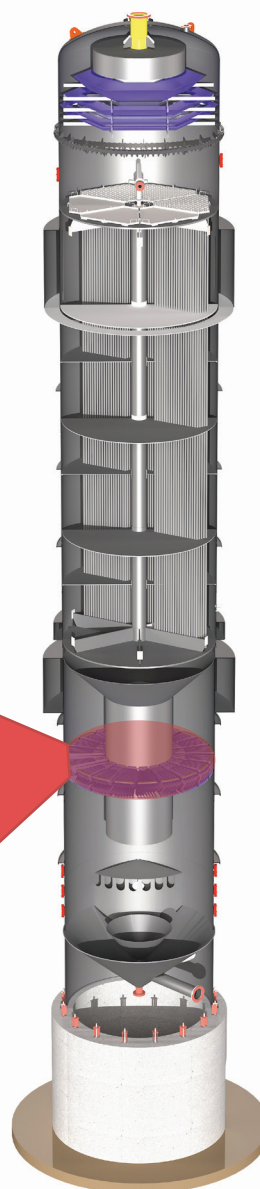
2500 TPD Standalone Refinery
- Triple Effect Melt Concentrator Falling Film Evaporator, Saudi Arabia

ACTUAL AVERAGE VAPOR TEMPERATURE PROFILE at sugar plant

(7 effect configuration - All FFE)



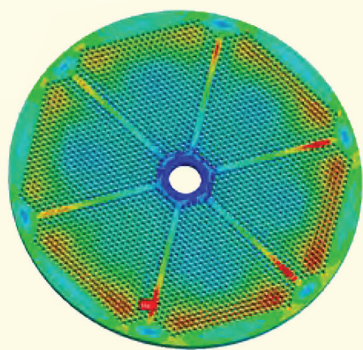
New Design



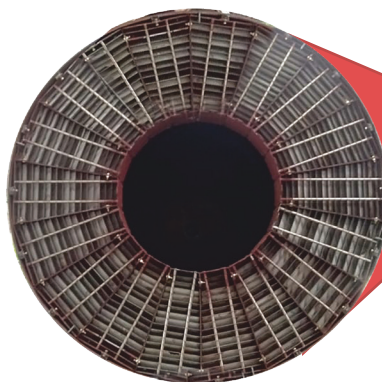
FEA Analysis of Top Tube Sheet with SS 304 Tubes in Hot Condition

B: Static-SS304
Equivalent Stress
Type: Equivalent (von-Mises) Stress
Unit: MPa
Time: 1
Custom
Max: 187.46
Min: 4.0106

ANSYS
R15.0



0.00 500.00 1000.00(mm)
250.00 750.00



Certification of Registration of Design
from the **India Patent Office.**
Special Design of Entrainment Catcher in
Falling Film Evaporators
- **Annular Polybaffle** for Evaporators in
Sugar Mills

Isgec FFE Installations (210+ Nos)

Heating Surface Area (m ²)	No. of FFE's Installed	Sugar Plant Name
8000	3	Biobuild Infra Pvt. Ltd. (MRN Nirani Mudhol), India
8000	2	Shivshakti Sugars Ltd., India
7500	1	Y. M. Krishna SSK Ltd., India
7000	1	Biobuild Infra Pvt. Ltd. (MRN Bhima Sugar and Power
6500	1	Y. M. Krishna SSK Ltd., India
6500	3	Jawahar SSK, Hupari, India
6000	3	Dalmia Bharat Sugar, Jawahar Pur, India
6000	2	Jawahar SSK, Hupari, India
5700	6	K.P.R Sugar Karnataka, India
5500	6	DCM Shriram Ltd., Loni, India
5000	9	DCM Shriram Ltd., Ajbapur, India
5000	8	Bindal Papers Mills Ltd., India
5000	5	Shri Dutt India Pvt. Ltd., India
5000	2	K.P.R Sugar Karnataka, India
5000	2	Swaraj India Agro, India
5000	1	Rana Sugars Ltd., India
5000	1	Narmada Sugar, India
4700	2	Shahukagal SSK, India
4500	3	DCM Shriram Ltd., Loni, India
4500	4	Inamdar Sugars Ltd., India
4500	5	Triveni Engineering & Industries Ltd., Deoband, India
4500	1	Daund Sugar, India
4000	2	Inamdar Sugars Ltd., India
4000	4	Ajinkyatara SSK, Satara, India
4000	1	Venkteshkurpa, India
3600	4	UP Cooperative Sugar, Munderwa, India
3600	4	UP Cooperative Sugar, Pipraich, India
3500	6	DSCL Sugar, Hariawan, India
3500	4	Agrolmos, Peru
3500	4	Twenty One Sugar, India
3500	4	Belgaum Sugars Pvt. Ltd., India
3500	2	UP Cooperative Sugar, Pipraich, India
3500	2	UP Cooperative Sugar, Munderwa, India
3500	2	Jaywant Sugars Ltd., India
3340	10	White Nile Sugar, Sudan
3300	1	Saraswati Sugar Mills, India
3000	5	Dalmia Bharat Sugar, Nigohi, India
3000	4	Prasad Sugar & Allied Products Ltd., India
3000	4	Haryana Cooperative Sugar Limited, Karnal, India
3000	4	KPR Sugar Mill Limited, India
3000	2	Swaraj India Agro, India
3000	1	Sar Senapati Ghorpade Sugar, India
2800	4	Panchganga Sugar and Power Pvt. Ltd., India
2600	1	Savannah Sugar (Dangote), Nigeria
2500	9	Shivshakti Sugars Ltd., Belgaum, India
2500	5	Panchganga Sugar and Power Pvt. Ltd., India
2500	2	Twenty One Sugar, India
2500	1	UP Cooperative Sugar, Mohuiddinpur, India
2300	4	Belgaum Sugar, India
2300	3	Khatvmaan Agro Industries, India
2000	2	Bindal Papers Mills Ltd., India
2000	2	K.P.R Sugar Karnataka, India
2000	1	Baanganga, India
2000	1	Birajdaar, India
1700	3	Angadi Sugars & Power Ltd., India
1500	2	Durrah Sugar Refinery, Saudi Arabia
1200	2	Agrolmos, Peru
1200	5	White Nile Sugar, Sudan
1200	1	Shahukagal SSK, India
1100	4	Shivneri Sugars Ltd., India
1000	9	JGN Sitarganj & Biofuels Pvt. Ltd., India
800	2	Inamdar Sugars Ltd., India
800	2	Agrolmos, Peru
800	1	Durrah Sugar Refinery, Saudi Arabia
600	2	Twenty One Sugar, India
500	2	DSCL Sugar, Hariawan, India
350	2	Ingenio Tala Refinery, Mexico
300	3	Haryana Cooperative Sugar Limited, Karnal, India



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