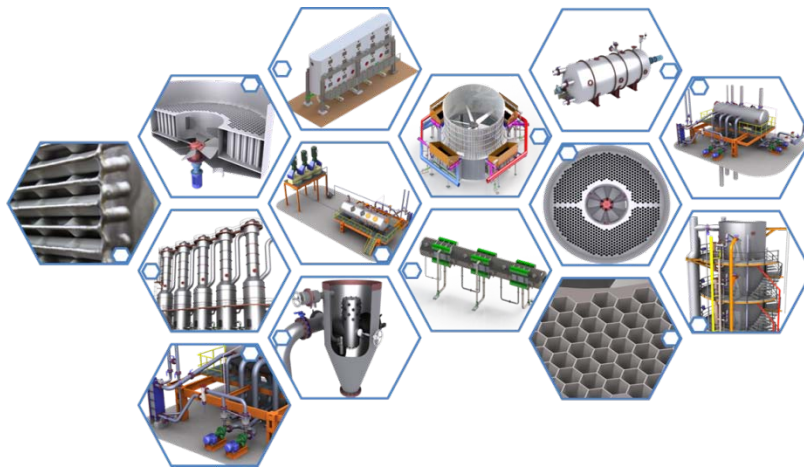
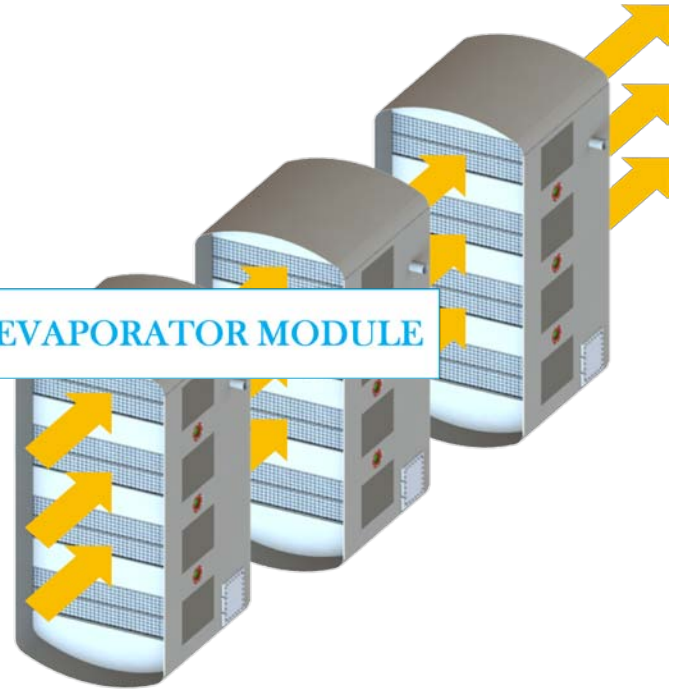


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LTEM™

LOW TEMPERATURE EVAPORATOR MODULE



Our range can now be extended to Drying, Gasification and Bio methane production which can double the value addition in Sugar cane processing

SEDL is now offering the most modern and efficient Evaporation technology

Our new range of products has been tested in selected factories in India and Pakistan and now we are ready for adoption at global scale

MISSION STATEMENT

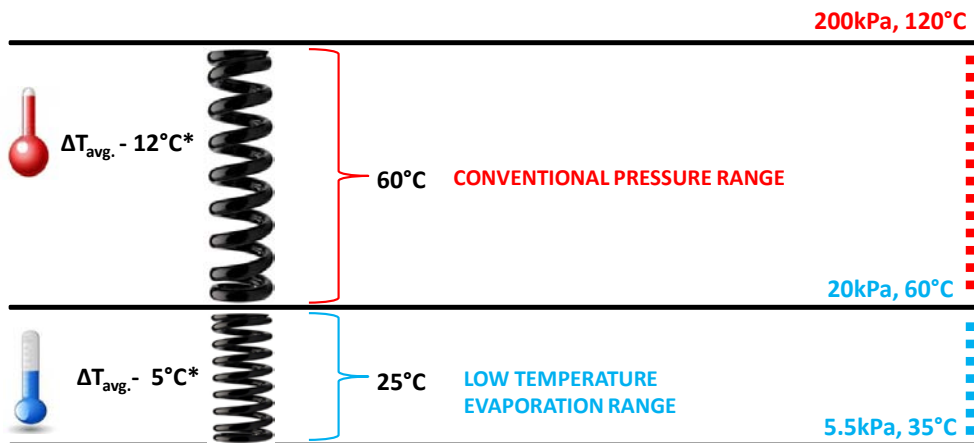
“Dedicated for Sustainable Environment Development to Unlock Perpetual Food and Energy Resources by Encouraging Innovation with Excellence”

1. Low Temp. Evaporation
2. SED Arrangements
3. Flow across plates

Low Temperature Evaporation



WHY LOW TEMPERATURE EVAPORATION?



*Temperature differences for five effects of Multi Effect Evaporator

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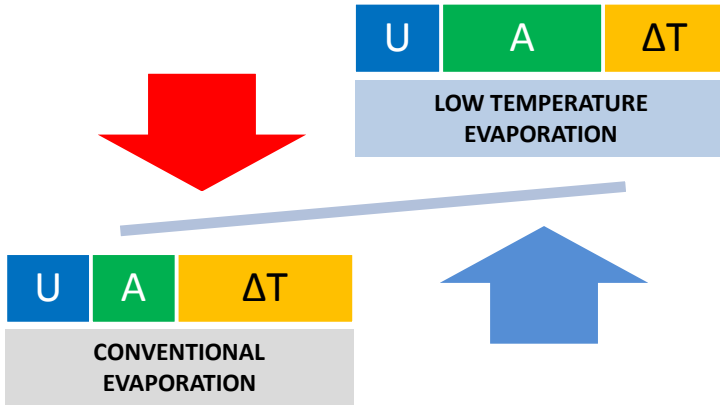
THERMODYNAMIC CONCERN



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TEMPERATURE

Accommodation of reasonable number of effects for the narrow range of 30 - 60°C

Requirement of suitable Heating Surface Area

Heat flow is independent of temperature but depends upon temperature difference

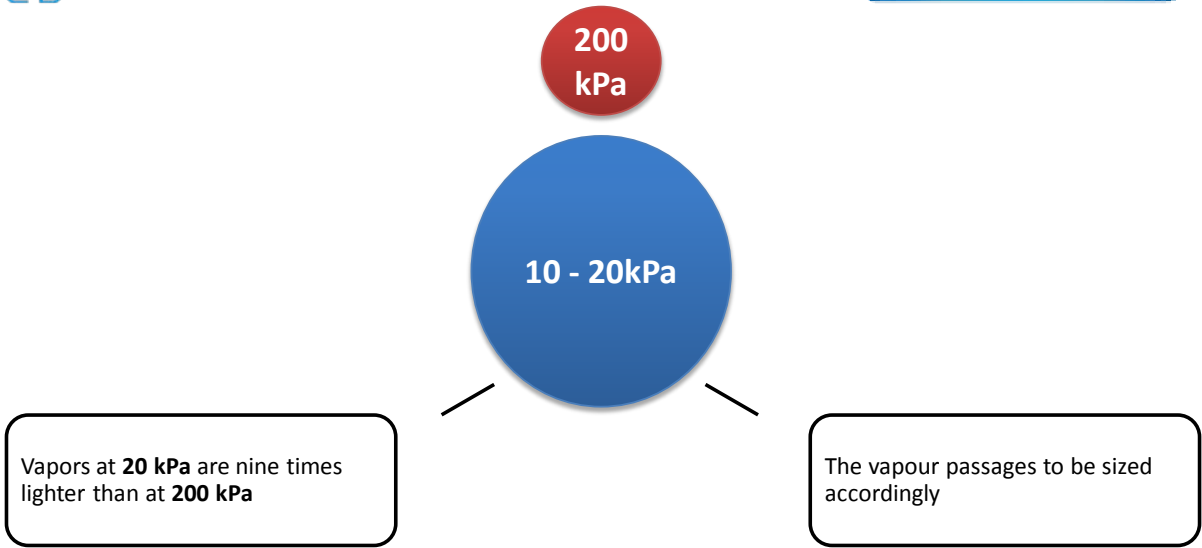
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SPECIFIC VOLUME



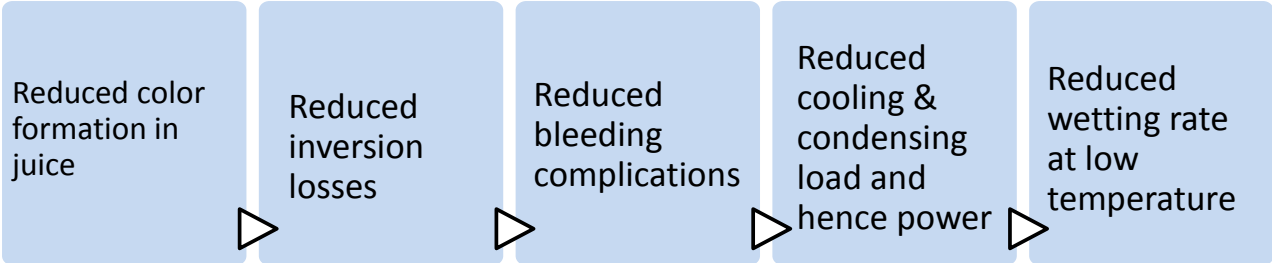
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ADVANTAGES



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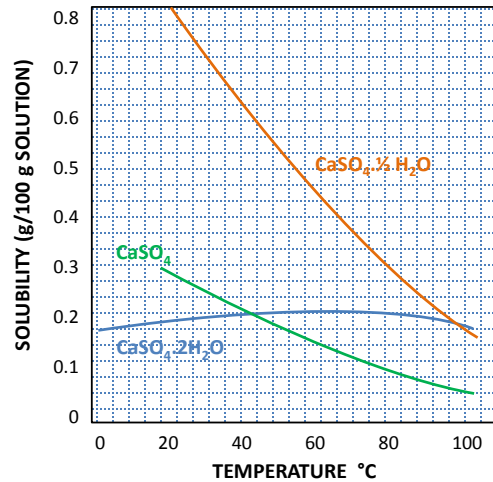
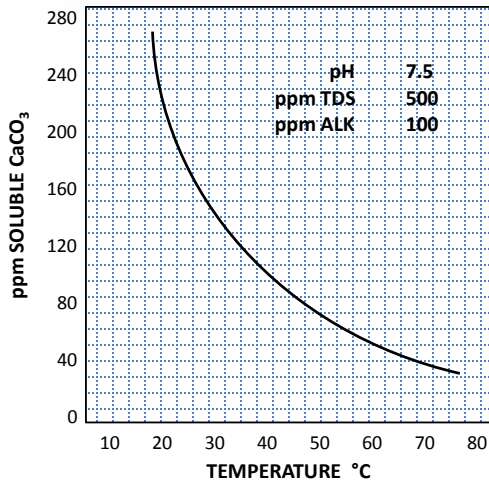
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ADVANTAGES – REDUCED SCALING

- Reduced Scaling and Cleaning Time



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ADVANTAGES – REDUCED SCALING

Less Scaling, hence reduced Downtime

Reduced operational cost

Better utilization of Heating Surface

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EQUIPMENT REMOVED

Exhaust-Vapor
Condensate
Heat Recovery



Robert
Evaporators



Juice Heaters
Chain driven
by Steam



Condensate
Flashing
above 100°C



Insulation of
Evaporators
and Heaters

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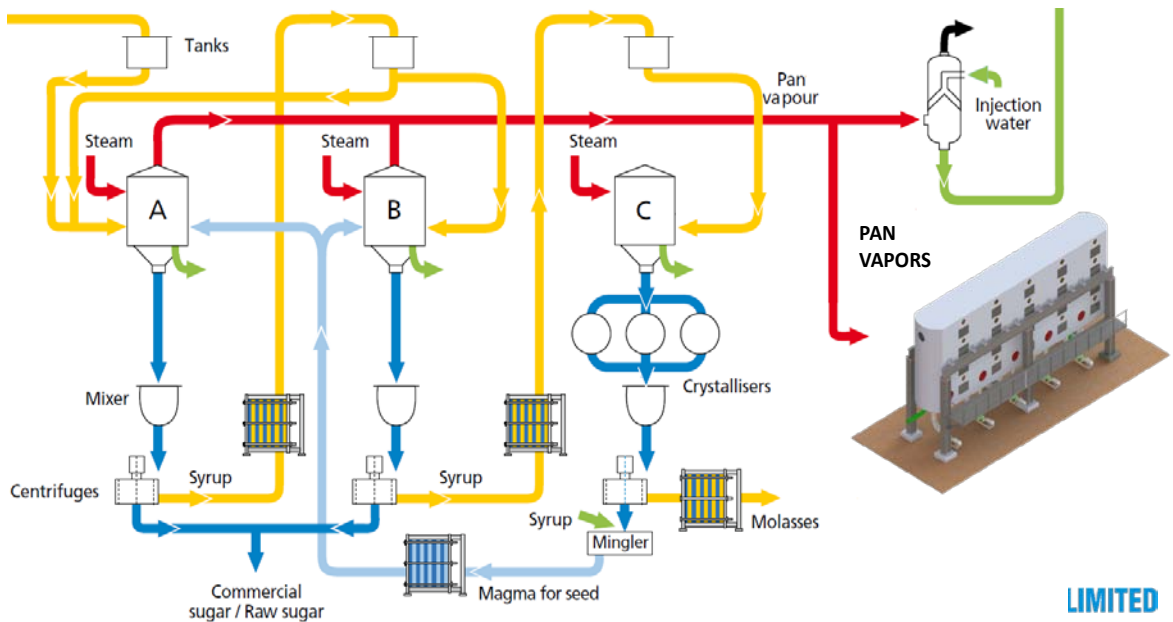


SED Arrangements

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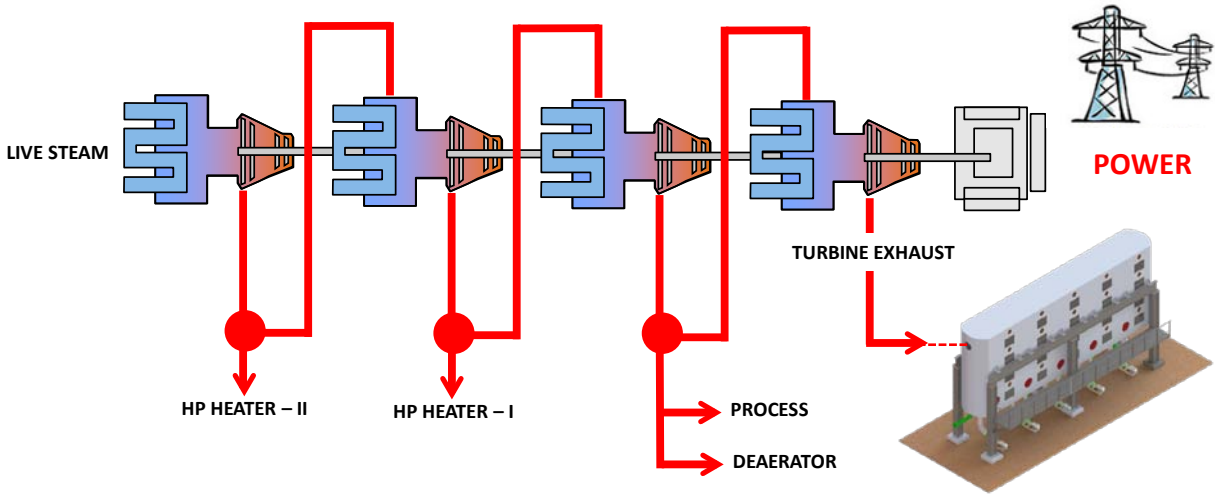
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LIMITED

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TURBINE STATION



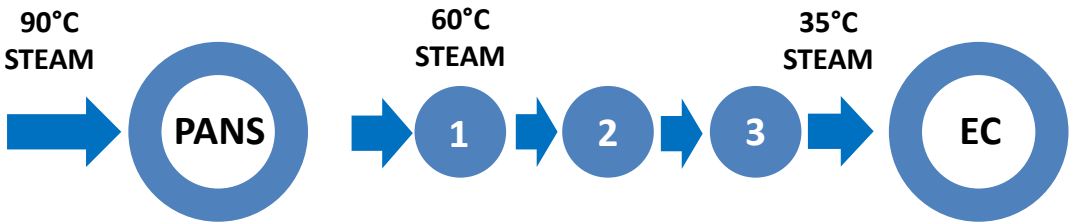
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SED PROPOSED SCHEME



TRIPLE EFFECT LOW TEMPERATURE EVAPORATOR MODULE (LTEM™)

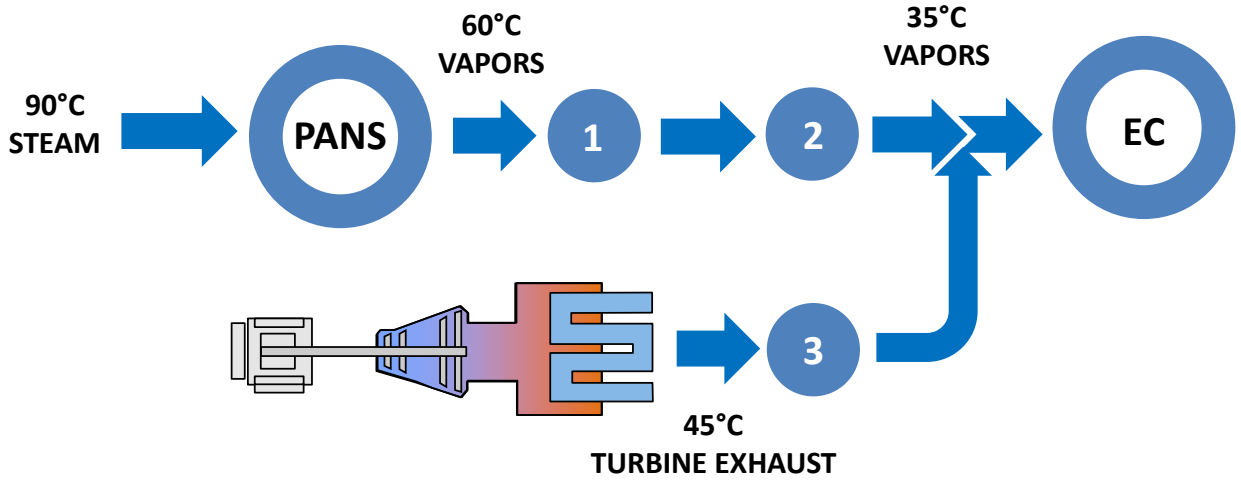
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SED PROPOSED SCHEME



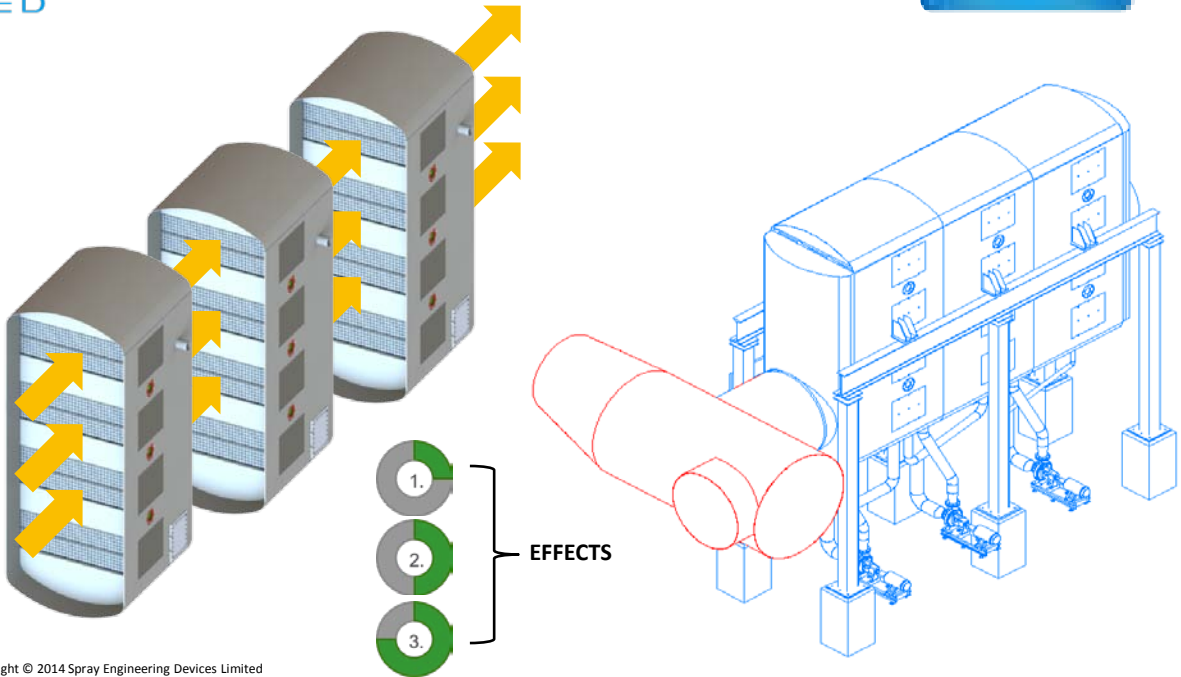
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LTEM™



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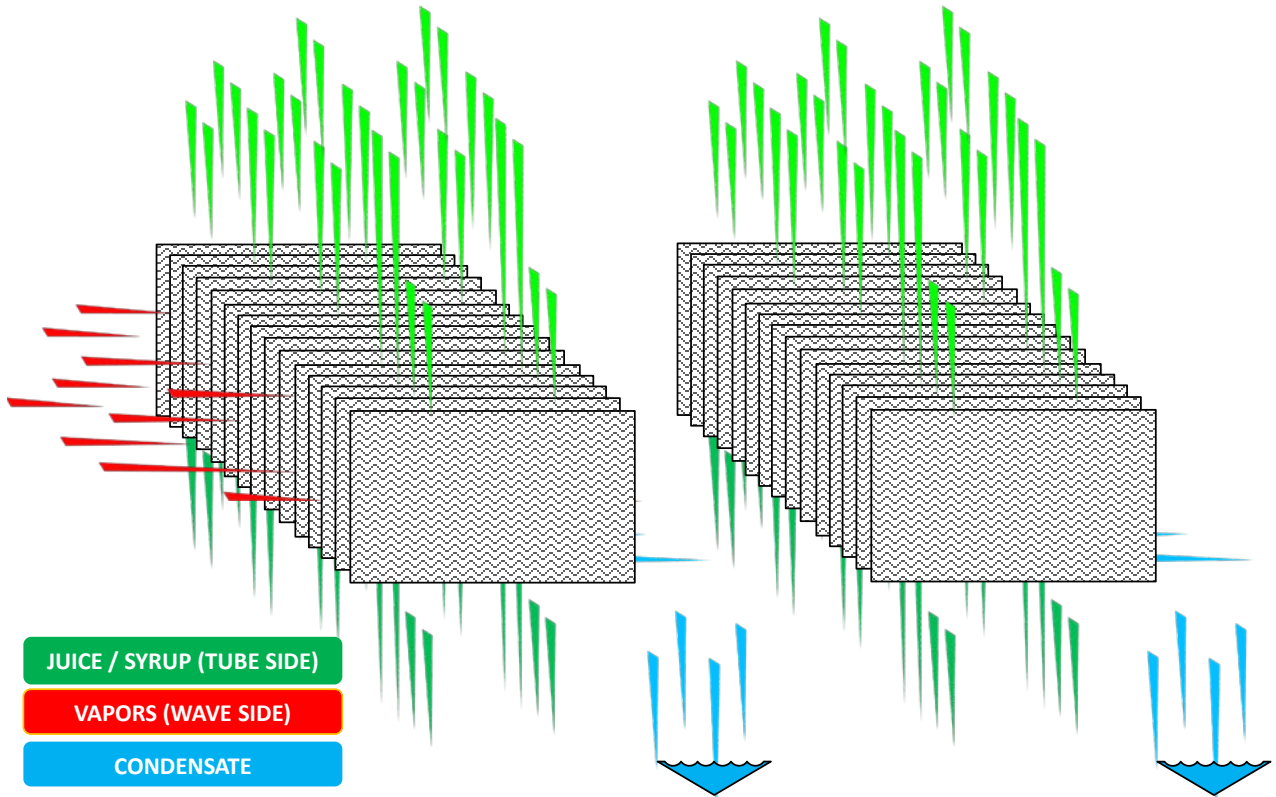


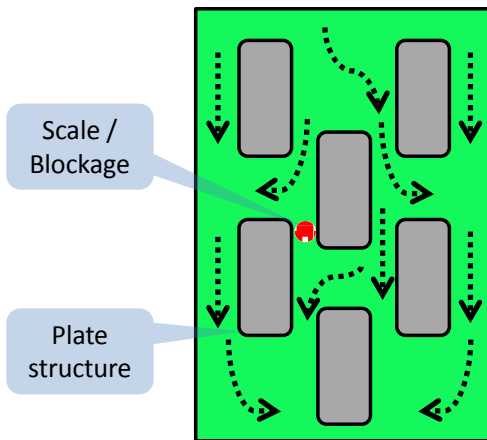
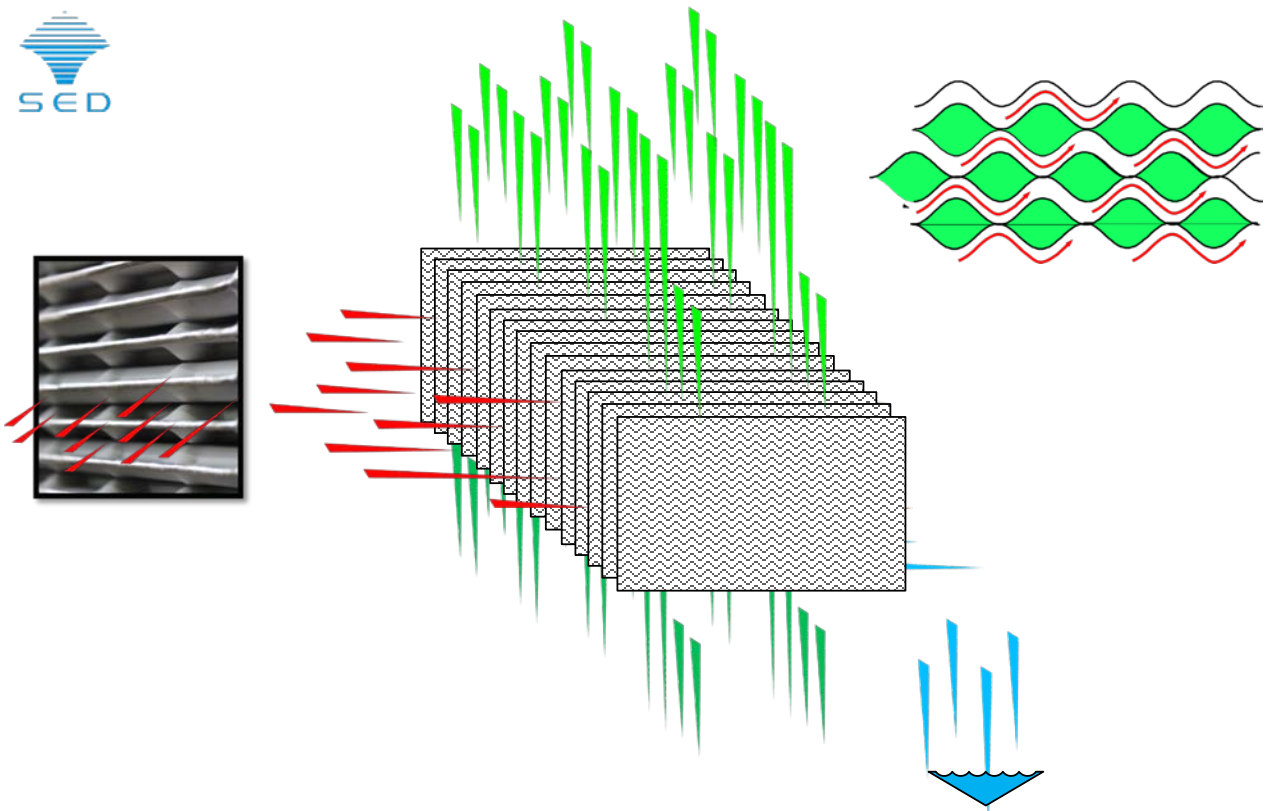
Flow Across Plates

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CLEANING ADVANTAGE

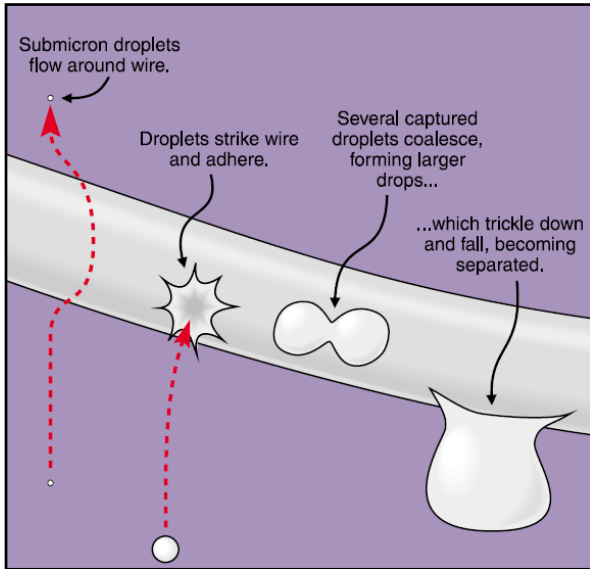
Plate is Flexing and Self Cleaning

Blockage doesn't buildup

Scale bursts off

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ENTRAINMENT SEPARATION

Submicron droplets flow around wire

Droplets strike wire and adhere

Several captures droplets coalesce which trickle down and fall, becoming separated

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CONCLUSION

Size of power plant should be based on own biomass fuel and not on prevailing process steam requirements

We can reduce process steam flow rate, pressure and temperature to suite power plant

Efficient power generation cycles can be adopted as process heat requirements gets reduced

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Spray Engineering Devices Limited
C-82, Industrial Area, Phase- 7
Mohali - Punjab - 160055
Phone: (172) 3029703 Fax: (172) 3029774
E-mail: info@sprayengineering.com

www.sprayengineering.com

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