



EcoSmart-ED™ - Evaporative Distillation

Expand your existing distillery with less than 3 years payback*

"Our existing plant capacity will increase by more than 80% while effectively saving steam consumption by 25% by selecting Praj's EcoSmart-ED™ technology ", says Distillery Manager of Leading Sugar & Ethanol Company.

"EcoSmart-ED™ offers us the ability to operate on low pressure steam; generate surplus power" says the MD of a Greenfield Sugar & Ethanol Plant.



Market forces are creating multiple challenges for ethanol plant owners and operators around the world, energy and water on top of the list. This is especially true in case of expansion of ethanol/beverage alcohol plant. Or, in the case of greenfield ethanol plant where the objective is to produce revenue by selling excess power to the grid. So, how does one expand a distillery or enhance surplus power without considerable investment in utilities and related infrastructure?

Praj's EcoSmart-ED™ is the answer to these challenges.

EcoSmart-ED™

EcoSmart-ED™ incorporates Evaporative Distillation, an advanced technology which enables ethanol plants to enhance their throughput with virtually no increase in energy consumption. This also helps keep capex lower as one does not have to invest in a new boiler or other utilities. In greenfield plant, the saved steam can be used for feeding the grid, thereby generating extra revenue.

In EcoSmart-ED™, the fermented mash is sent to evaporative distillation followed by analyzer/mash column. The stripped alcohol from the mash/analyzer column is sent to the rectifying column which produces hydrous alcohol of desired concentration. The hydrous alcohol produced through this system can be further processed into either beverage or fuel grade alcohol.

EcoSmart-ED™ is suitable for greenfield and brownfield distilleries using varied feedstock including sugary and starchy feedstock.

EcoSmart-ED™ plants can be offered as skid mounted, modular units.

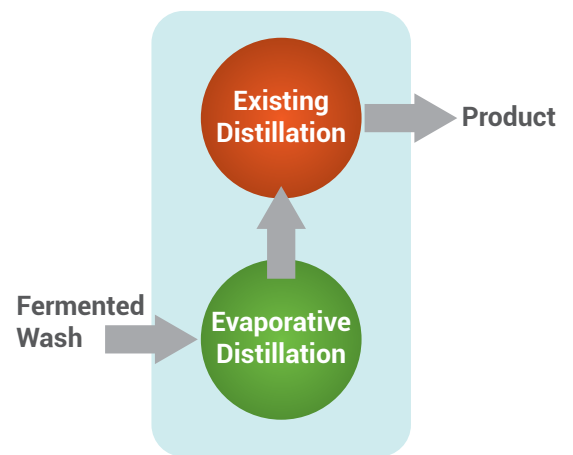
How does an existing or greenfield distillery benefit by adopting EcoSmart-ED™ technology?*

- EcoSmart-ED™ is the best in class technology for reducing water and energy consumption or increased throughput by 30% in existing plant without any additional steam and water consumption.
- It requires lower downtime for expansion of existing plant
- It reduces fouling in conventional atmospheric distillation plants, thereby reducing downtime
- It requires reduced footprint as opposed to split distillation system

*Depending upon geography and existing infrastructure, can be less than 2 years.

*Patent awaited.

Schematic



Certification ASME, TUV, CE, CCODE, ISO 9001 or any other global standards are required.



Praj Worldwide

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