

# LED™ (LOW ENERGY USAGE DISTILLATION)

## OPPORTUNITY

LED converts Delta-T facilities or any high pressure distillation systems to lower temperature vacuum distillation. The benefits include lower energy usages and increased plant uptime, resulting in increasing yearly throughput.

With a project window of less than 8 months, and less than 15 month return on this project, this opportunity is a game changer for Delta-T plants.

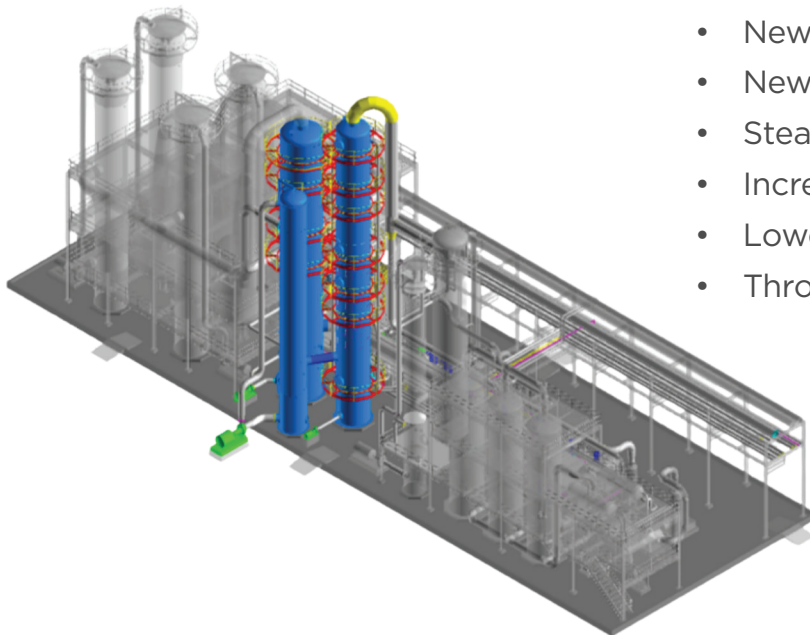
## PROJECT DETAILS

This conversion eliminates downtime associated with CIP of the beer column and evaporators, increasing uptime and production. LED can bring your plant's steam usage down by as much as 40%, allowing you to operate below standard vacuum distillation system. This results in a reduction in OPEX from current operations. Lower temperature vacuum distillation reduces column fouling, thus reducing CIP needs. The resulting increased plant uptime allows operations teams to dictate shutdown frequency to as little as annual shutdowns.

## EXPERIENCE

FQT's experience combined with Thermal Kinetics process capabilities, capitalizes on engineering expertise and experience to deliver a top-notch distillation and plant integration, turnkey project.

## PLANT CONVERSION



- New Beer Column
- New Reboilers
- Steam usage down to 8.6lbs/gallon
- Increased uptime
- Lower OPEX
- Throughput gains