

The RELCO[®] Hi-Con Evaporator is specifically designed for use with our L-TECH Permeate Drying System. It is intended to concentrate permeate from feed solids of approximately 55-60% total solids to a discharge concentration of 75% total solids. The Hi-Con Evaporator utilizes TVR evaporation technology to minimize steam consumption.



FEATURES & BENEFITS

- Generous surface area is used in the calandria to promote longer run times with increased efficiency
- Multiple passes allow greater tube wetting rates. In addition, each pass recirculates upon itself, greatly increasing again the tube wetting rate, promoting longer run times with increased efficiency
- The evaporator balance tank is integrated into the calandria base for reduced equipment footprint
- 316L product contact surfaces are standard
- Advanced automation includes automatic density control, forward flow capability for faster startups and CIP cycles, and automatic water flushes which can be activated by time or by plugged pipe detection

COMPONENTS

- **Preheaters**
Preheating is done with a tubular heater
- **Calandrias**
The heart of the evaporator where evaporation occurs. RELCO utilizes a falling film design. Calandrias are designed for each application to optimize surface area, tube wetting, and vapor velocities
- **Vapor Separators**
External vapor separators are sized to maximize evaporator condensate quality
- **Thermocompressors**
This is the way to use steam to evaporate water. Thermocompressors are used in thermal vapor recompression (TVR) evaporators, and use plant steam to entrain and compress water vapor. This vapor mixture is used to concentrate incoming product.
- **Piping**
Even the piping layout is specifically and uniquely laid out for the Hi-Con, allowing for reliable operation at very high product concentrations.

