# VAPOR COMPRESSION

## **OVERVIEW:**

- Leading manufacturer of vapor compression desalination plants
- Produces potable drinking water and high-quality distilled water
- Completely packaged units for minimum field installation
- Rugged oilfield skids with surface preparation and coatings suitable for marine environment
- Hazardous Area Classification options
- Superior energy efficiency
- Offers the largest vapor compression still available capacity of 20,000 GPH (76 m3/hr)
- All components manufactured by MECO
- Spare parts also available
- Supported by MECO 24-hour customer service
- Backed by warranty

# **PRODUCT HIGHLIGHTS:**

#### **Standard Features**

- Vertical natural circulation evaporator
  - Feedwater quality tolerance
  - Scale effects reduced
  - No pumps or spray nozzles
- Straight annealed tubes in evaporator
  - Individual tubes can be replaced as opposed to replacing the entire tube bundle
  - No residual stresses or surface finish problems commonly found with U-tubes
- Deaeration of feedwater
  - Non-condensibles removed prior to distillation
  - Corrosion reduction
- Corrosion resistant materials
  - 90/10 copper nickel
  - Titanium
  - Inconel
  - Monel

## Equipment Details Design Details

- Galvanized rigid steel conduit
- Stainless steel airlines
- Integrated control and instrument panel
- TEFC motors
- Blowdown: Bronze pumps with Monel shafts
- Distillate: 316 SST pumps with 316 SST shafts

### MECO Vapor Compressor

- Manufactured by MECO
- Immediate spare parts availability
- Exchange program
- Inconel impeller and Monel-process contact components
- New Lube Lock Sealing System
- Directly mounted with no vapor ductwork
- Space friendly
- Smaller footprint
- Easy access for maintenance

Model	CAPACITY in GPD [m3/day]
PEE300M3C	7,200 [27]
PEE400M3C	9,600 [36]
PEE600M3C	14,400 [55]
PEE800M3C	18,500 [70]
PEE1250M3C	30,000 [114]
PEE2100M3C	50,000 [189]

Notes: Capacities are based on seawater with a TDS of 35,000 ppm at 77°F (25°C). MECO M3C units typically operate based on a concentration ratio of 1.77.





