



# Low Energy Transmix Distillation

**Customer:** Transmix Terminal Company

**Location:** Southeastern US

**Problem:** Client had a fast track production capacity need to separate a fuel oil/gasoline stream stored in terminal tanks at their location for resale into the market.

**History:** Local market conditions for processing transmix feeds became available for a terminal facility owner. The company needed to add distillation capacity at their plant to meet the latest market demands.

**Solution:** The client requested that ChemPro design a low energy continuous distillation system that would separate fuel oil and gasoline into resalable products. The unit needed to improve energy usage and have a 2 to 1 turndown range in capacity. ChemPro designed, engineered, and built a skid-mounted continuous distillation system, incorporating several unique equipment designs to reduce energy usage by 40-50% compared to existing transmix distillation designs. The unique design included a multi-effect heat integration and reclamation step which can also be a stand alone add-on feature for existing transmix fractionation units.

**Results:** The unit has met all process criteria and energy usage requirements.



**Modular distillation system:**

Structural frame: Galvanized steel  
Column: with anti-fouling trays  
Multi-effect heat integration section  
Overhead Condenser  
Product & Bottoms coolers  
Reflux Tank  
Reboiler Circulation Pump-API Sealless  
Reflux Pump-Sealless  
Piping: Carbon Steel  
Instrumentation: 316SS Wetted parts  
Functional write-up and logic control system