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Unused C3 (Propylene) Splitter - 300000 TPY

Capacity: 28 tons/hr (approximately 225,000

- 300,000 TPY)

Products: Purified Propylene (98.25%),

Propane

Major Equipment

- Inlet Filter
- FCC Dryer & Particulate Filter
- Dryers Regen Electrical Heater
- Regeneration Heater & Economizer
- Regeneration Filter, Condenser & Decanter
- C3 Stripper & C3 Stripper Condenser
- Stripper Reflux Drum
- C3 Stripper Reflux Pump & Reboiler
- Steam Condensate Drum
- C3 Stripper Condensate Pump &C3 Splitter
- Compressor Suction Drum
- Overhead Compressor & Propylene Accumulator
- C3 Splitter Trim Condenser, Propylene Subcooler
- Propylene Product & C3 Splitter Reboiler
- Propane Product Pump
- Propylene Adsorber Drum, Product Pre-Filter
- Arsine Guard
- Propylene Product Filter & Trim Cooler
- Absorber Regen Electrical Heater
- Regeneration Feed Effluent Exchanger
- Regeneration Air Cooler
- Blow Down Drum & Flare Transfer Drum
- Blow Down Vaporizer

Brief Plant Description

Unused C3 splitter designed by Linde Engineering convert refinery-grade propylene (75-77%) and/or chemical-grade propylene (90-92%) to purified propylene (98.25%) and propane. The unit includes 4 process sections: (1) Dryer, (2) C3 Stripper, (3) C3 Splitter, (4) Treatment. The process flow involves pre-drying the refinery grade propylene in molsieve (3A) dryers, followed by stripping in a column to remove light ends. The chemical grade propylene is fed directly into the splitter column due to its higher quality. The splitter column has two different feed trays to accommodate both feeds at their optimum point. Further purification of the propylene product occurs through a series of regenerative and nonregenerative treaters to eliminate components potentially detrimental to the polypropylene process. Regeneration systems for both refinery grade raw propylene (dryers) and regenerative propylene product treaters are integrated into the package. Vessels under nitrogen blanket. Full technical documents available