



## C3 (Propylene) Splitter System – Never Installed

### Capacity:

18 tons per hour of RGP feed  
10 tons per hour of CGP feed

### Products:

PGP (Polymer Grade Propylene)

### Major Equipment Includes:

(1) FCC Dryer Section

(2) C3 Stripper Section

(3) C3 Splitter Section

(4) Treatment Section

(5) Flare Blowdown Section

### Brief Plant Description

Never installed and unused C3 Splitter System, designed by Linde AG in 2011. Design capacity was to process 10 tons per hour of Chemical Grade Propylene (CGP) from a nearby Ethylene Plant (including a gaseous recycle stream from PP-Plant) and 18 tons per hour of Refinery Grade Propylene (RGP) from two FCC Plants (including a liquid recycle stream from PP-Plant) to produce Polymer Grade Propylene (PGP - 98.25%). The final propylene product was intended to be suitable for use as a feed in polypropylene plants or other chemical applications. The system offering includes 4 process sections: (1) Dryer, (2) C3 Stripper, (3) C3 Splitter, (4) Treatment; and includes both pretreatment and posttreatment purification stages.

All equipment involved in propylene processing is constructed using low temperature impact tested carbon steel to withstand flash temperatures as low as minus 47°C. All rotating equipment meets or exceeds the relevant API standards, and static equipment (pressure vessels) complies with ASME code Section VIII Division 1. The equipment was specifically engineered for operation in a warm and humid climate, without consideration for winterization conditions. C3 Splitter doesn't include trays. C3 Stripper Condensate Pumps aren't included. Calculations have been made to increase the ultimate design feed rates of up to 14 tons per hour of CGP and 23 tons per hour of RGP with minor upgrades that include installing a second reboiler and replacing the rotor and motor for the overhead compressor.