

# Pilot Plant -2

## • *Reactor:*

- Axial-Radial Flow Reactor 6400x17000mm
- Two set of Panels / Internals (Low alloy steel)
- Additional gas-kits
- No of Plats in internal 1: 4 (3 catalyst beds)
- No of Plats in internal 2: 3 (2 catalyst beds)
- Length of Internal 1= 400 mm
- Height of Internal 1 = 1350 mm
- Width of Internal 1 = 30 mm
- Volume of Catalyst per bed ~ 12.6 liters
- Total Catalyst Volume = ~37.8 liters
- Design Temp: 380C; Pressure 11barg
- Reactor Vessel OD: 1025mm
- and High: 2524mm; Reactor Weight: ~2129kg
- Feed Filters/Traps
- *Separators:* Two
- Separator-1: 100lit (180/140C)
- Separator-2: 200lit (40/5C)

## *Feeding System:*

Nitrogen Flushing heater 4.5kW – 400C  
Gas Pre-heater: SP-400C (Outlet 350C)  
Heat tracing ATEX certified: upto 450C  
Circulating BFW start-up heater 50kW – 260C  
Circulating BFW Chiller/Cooler

## *Steam/Expansion Drum:*

Design Temperature: 250C; Pressure 40barg  
Carbon steal (with SS internals)  
Centrifugal circulating BFW pump 70kW

## *Flare System:*

Flare load 100kW (for Propane 26kW/m3)  
Design

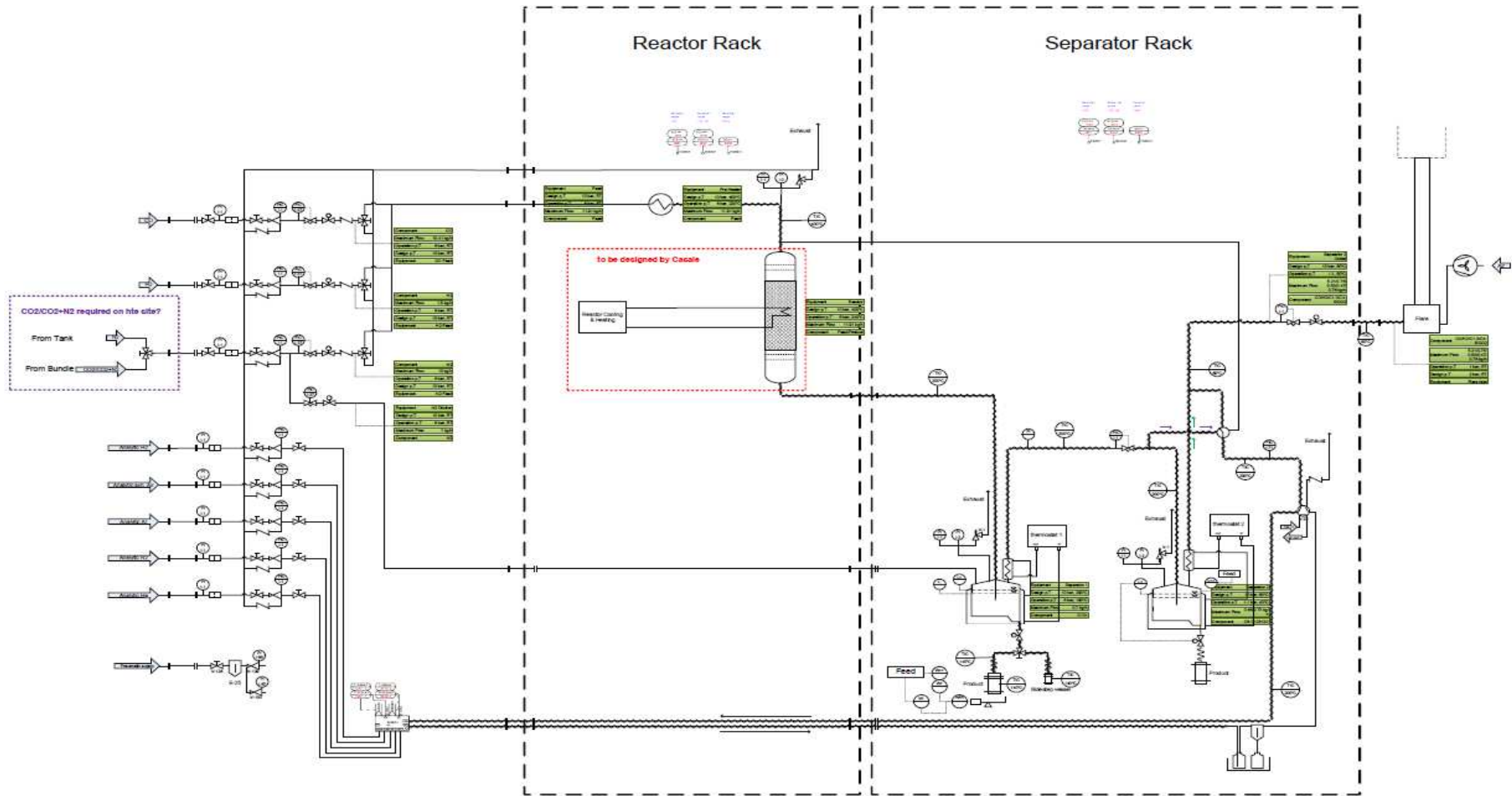
## *Control Room:*

Seimens PLC with electrical cabinets  
Container of control system

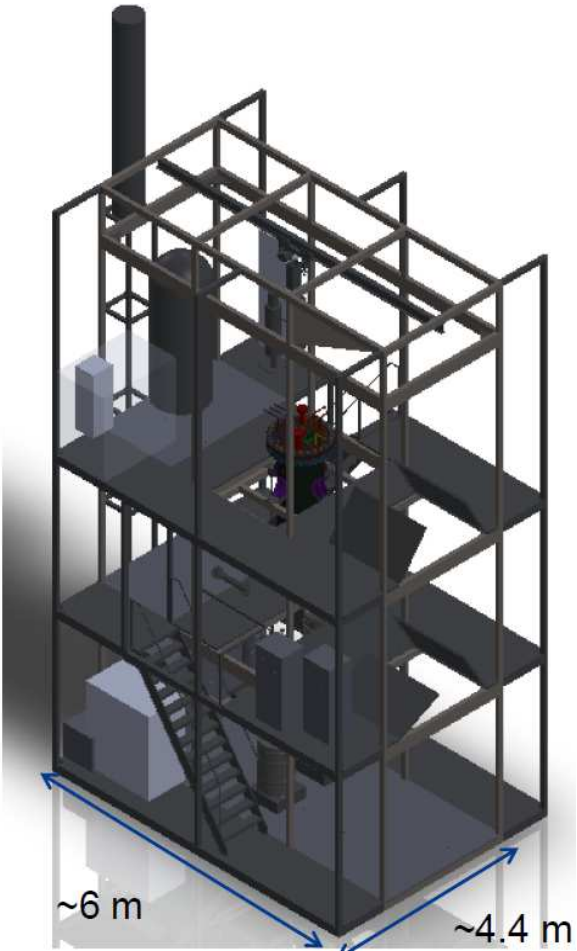
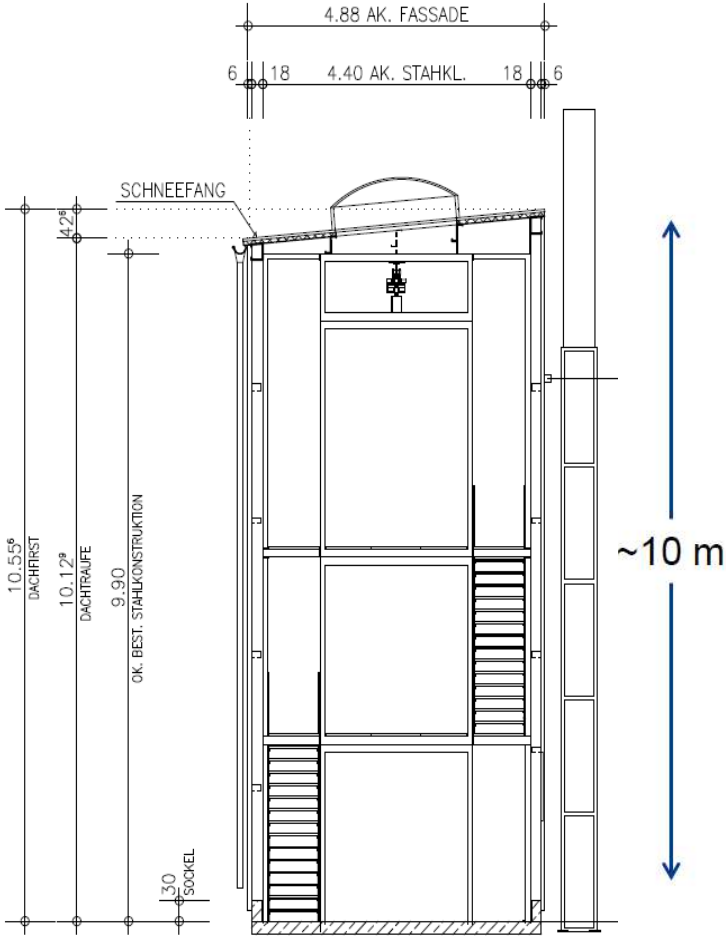
## *Analytics:*

Agilent GC

# PFD



# Pilot plant Layout



# Inside Pictures of Pilot Plant

