

StartUp Challenges

Jeff Fitt



Pre Shutdown

- Training-
 - How you are doing it SD/Clean
 - What are you working on
 - Acid Strategy- Storage and relief
 - PPE strategy
 - Access Strategy
 - Equipment Decon
 - Agreement with environmental group on Getting rid of HC/Cleaning fluids
 - Strategy on pumps- Use or not for cleaning
- Request the largest bundle puller in the country

S/D-Cleaning

- Someone dedicated to document the steps
- Go to minimum levels- acid- LPG
 - Regen Acid, Sample Regen S/D and solvent soaking
- Remove Acid-Remove LPG and Alkylate-
 - Test RATS
- Save alkylate for S/U
- Nitrogen Available
- Hoses/Tubing Tarps available
- Pre establish low points- “liquid traps” and how they will be addressed

S/D-Cleaning continued

- Identify LPG pockets and how to get Rid of them
 - Tarps / steam
- Cleaning
- Staffing to address leaks during cleaning-
 - How to tag these leaks
- Cleaning
 - Drawings for outside reference
 - Criteria on when it is clean
 - Thermal imaging Check FLIR Camera
 - Target to draining at 2AM

Mechanical

- Blinds
 - First line break – protected airway. Bull plugs
 - Secure the acid –
 - Locks, Barriers, Signs
 - Document locations
 - Zero energy
- Reference Book covering work
 - Locations
 - Blinds
 - Scope of job
- Work period
- Trapped Hazards-Bundles, closed valves,

Nearing the End

- Drying out heater, flush lines
- Painting all connections
- Address grease connections
- Equipment Access
- Treater catalyst needs
- Testing Emergency Equipment
 - RATS
 - Trips
- QAQC
 - Valves, gaskets, blind locations

Mechanical End

- Pulling ALL the blinds
- Loop checking line ups
- Start up reviews
- Equipment access
- Recheck Blind Removal
- Project Closeouts
- Recheck Blind Removal

Nitrogen

- 3 tiered pressure test
- Helium on the third option
- Looking for leaks
 - Sonic
 - Bubbles / snoop
- Purge through RV's
- Inventory
 - LPG / Alkylate

Dryout

- Checking low points for water
- Driving water to the Depropanizer OVHD Accumulator
- When You are dry (you think)
 - Pressure swing the Fractionator to flash water of the trays
- Dry
- Job Safety Review prior to acid

Acid and S/U

- Pump acid
- Light a candle in the window, have a scotch, pray.....
- Survey the unit for red flanges
- Water is generated during the addition
- Option – one or two deprop boots to the RGS
- If you torqued, found all the leaks prior to- you should be ready for olefins after the acid is tested and found to be good.

Post Startup

- Solids and emulsions
 - Takes about two weeks maybe three to flush most of them out.
- Nitrogen purging from vapor pockets
- Fresh acid Vs Unit acid- strength
- Test products
- Drink more Scotch



CONTACT US:



becht.com/contact

+1 (908) 580-1119



[/company/becht](https://www.linkedin.com/company/becht)



BECHT

Good. Better. Becht.™