John Wagner

Process Engineer - Paulsboro Refining, PBF Energy

West Chester, PA - Email me on Indeed: indeed.com/r/John-Wagner/a7e3ec32c2fd0fdf

Obtain employment as a process engineer for projects, operations or process safety.

WORK EXPERIENCE

Process Engineer

Paulsboro Refining, PBF Energy - Paulsboro, NJ - 2013 to Present

Unit Engineer for Naphtha Hydrotreater, CCR Reformer, and Gasoline Treater.
o Roles: Review daily unit performance, troubleshooting, write monthly monitoring reports, catalyst management, Optimize unit conditions for economics
o Participated in turnarounds for the above units and a crude/lubes complex

Process Designer

ExxonMobil Research & Engineering - Baytown, TX - 2001 to 2013

Design Team Lead

ExxonMobil Research & Engineering - 2012 to 2012

2012
o Roles: Defined schedule and resource needs for 8 member team, trained new team members, Guided Heat & Material Balance simulation, guided equipment study and design, created P&IDs, wrote operating guide, interfaced with refinery team to resolve and align on technical and cost complexities. Attended Knowledge Based Pre-HAZOP with existing facilities risk considerations.
o Scope: Modified/replaced reactor internals, catalyst change, internals and nozzle changes in vacuum stripper/dryer, 8 new exchangers, assessed 16 existing exchangers, 5 new pump services, assessed recip compressors to allow unit recycle, instrumentation and control philosophy for more complicated lubes technology, sized new vessels, rated existing vessels, conducted design temp and pressure analysis, evaluated pressure protection with relief valve sizing, developed emergency shutdown systems with depressure calcs, set availability targets.
o Deliverables: Design specification given to EPC contractor that includes equipment, instrumentation, safety facilities, plot plan, and P&IDs; Heat and material balances; Operating guide, Materials of construction, Design pressure and temperature diagram (these are typical for design roles listed below)

Co-author

ExxonMobil Research & Engineering - 2011 to 2011

2011
o Roles: Simplified the processes of syngas generation, auto-thermal reforming, gas to liquid reaction, and product separation such that college seniors could analyze the problem and design a solution. Reviewed students' design packages to select a winner

Design Team Lead, Hydrogen Recovery and Compression

ExxonMobil Research & Engineering - 2010 to 2011

o Roles: negotiated technical terms of a large, profitable hydrogen sharing agreement between refinery and neighbor ethylene plant. Led a 5 member team during schedule compressed design package, followed

up the design package at the EPC contractor's office by reviewing and approving contractor and vendor documentation and calculations, attended EPC HAZOP
o Scope: 2 PSAs, amine tower, 1 centrif compressor, 1 screw compressor, 2 recip compressor services.

Design Team Lead, Naphtha Fractionation
ExxonMobil Research & Engineering - 2009 to 2009

2009
o Roles: Similar to above design lead roles.
o Scope: Replaced tower top and packing, 3 S/T exchangers, 1 air cooler, 3 pump services

Design Team Lead, Fluid Cat Cracker Fractionator
ExxonMobil Research & Engineering - 2007 to 2008

o Roles: Similar to above design lead roles. Extensive base case and project case heat and material balance study of cat fractionator and light ends plant.
o Scope: changed tower internals to create new side stream, new pumps, new exchangers.

Design Team Lead, Sour Water Stripper
ExxonMobil Research & Engineering - 2007 to 2008

o Roles: determine stripper tower max processing, then discuss with refinery how to limit sour water production. Simulated the heat and material balance
o Scope: new TEMA reboiler, air cooler, pump and hydraulics confirmation

Designer, Safety Liquid Overfill Guide
ExxonMobil Research & Engineering - 2007 to 2007

2007)
o Roles: Joined a team of refinery and chemicals designers and safety specialists to better incorporate liquid overfill considerations into process unit design strategy, in response to an industry incident. Co-authored a guidance document that summarized the expectations and interpretations of industry and company standards.

Designer
ExxonMobil Research & Engineering - 2007 to 2007

2007
o Roles: Led a team of 2 to model pressure relief scenarios to a blowdown drum and stack exit, coordinated stack plume models for composition and flammability
o Deliverables: design spec including water seal modifications, stack height changes, and diversion of streams inappropriate for condensable blowdown.

Designer
GTL Reaction & Separation Equipment - 2005 to 2007

Designer
ExxonMobil Research & Engineering - 2004 to 2005

R&D Chemical Engineer
Rohm & Haas Morton Powder Coatings - Reading, PA - 1999 to September 1999

Co-op) the development of high heat tolerant silicone based powder coatings. Initialized experiments to advance coating heat tolerance by incorporating proprietary components and extrusion technology. Conducted trials for powder coating application to wooden surfaces.

EDUCATION

BS in Chemical Engineering

Lehigh University - Bethlehem, PA
1997 to 2001

ADDITIONAL INFORMATION

Experienced project developer and process designer that can assess existing process unit performance and design new units, including safety considerations. Skills developed during 2 years of operations and 12 years designing and safety analyzing oil refinery process units around the world can be applied to many industries and project sizes.

SKILLS

Process Simulation (ASPEN, HYSYS, PRO-2); HTRI Heat Exchanger design; Pressure safety relief analysis and safety shutdown systems; Attended numerous Pre-HAZOPs and EPC HAZOPs; Fluid flow and hydraulics; Flexible to work alone, on team, or lead team; Attended numerous process and safety training courses; Basic Spanish language skills; Thorough and effective personal communication skills.