

## PROFESSIONAL SUMMARY

Recent Chemical Engineering graduate specializing in simulation and optimization tools such as Aspen HYSYS. Demonstrated proficiency includes conducting HAZOP analysis and ensuring regulatory compliance to enhance operational efficiency and safety protocols. With a solid foundation in production knowledge and completion of 10 Aspen projects, I am eager to apply my academic knowledge and practical skills effectively in a Process Design Engineer role.

## PROFESSIONAL SKILLS AND INTERESTS

- Process Engineering
- Technical Expertise
- Strong Production Basic
- Problem-Solving & Risk Management
- Continuous Improvement & Innovation
- Process Simulation and Modeling

## EDUCATION

Qualification	Institution	University/ Board	Year of Passing	CGPA/ Percentage
BE Chemical	Government Engineering College, Valsad	Gujrat Technological University	2023	7.27
H.S.C	Jay Ambe Vidhyabhavan, Ankleshwar	GSHSEB	2019	72.08%
S.S.C	Saraswati Vidhya Mandir, Ankleshwar	GSHSEB	2017	81%

## COURSES

- HAZOP – iFluids Engineering (MAY 2024-CURRNT)
- BPCS Vs SIS

## PROFESSIONAL SKILLS DEMONSTRATED

### [UNITOP CHEMICALS LTD, DAHEJ](#)

FEB 2024 – CURRENT

*"Unitop Chemicals Pvt. Ltd., Dahej, Gujarat, employs ~500 professionals, achieves a turnover of approximately ₹500 crores, and serves clients like (PI and Adama, Glenmark) in specialty chemicals and pharmaceutical intermediates."*

### **Junior Shift-incharge**

*"The responsibility of the Junior Shift In Charge is to oversee the efficient and safe operation of production activities, including team management and process control using DeltaV DCS software across multiple reactors."*

- **Utilized DeltaV to Optimize Production Process :** Managed the operation of 12 reactors using DeltaV DCS Implemented real-time monitoring and control strategies, optimizing reactor performance and ensuring adherence to production schedules. Achieved a 15% reduction in downtime through proactive troubleshooting and adjustment of process parameters.
- **Shift Management:** Lead production team, assign tasks, and resolve operational issues to maintain smooth workflow.

## PROCESS DESIGN ENGINEERING

DEC2023 – CURRNT

*“As a Process Engineer, responsible for overseeing various engineering aspects from concept to completion, ensuring compliance with industry standards and project requirements. Key responsibilities include project deliverables preparation, hydraulic calculations, distillation column design, pressure safety valve sizing, and coordination with multidisciplinary teams.”*

- **EPC:** Basic understanding of FEED & DDE of Epc company
- **Process Safety & Control :** Familiarity with HAZOP, PSSR, PHA, BPCS, SIS, and DCS methodology; committed to learning for regulatory compliance, safety adherence, and operational efficiency.
- **Process Design:** Line sizing,,Tank sizing ,Heat exchanger design,design standards & Codes,Pump Hydraulics,Psv
- **P&id :** Engineering drawings (BFD, PFD, P&ID) overview, Legends and symbols, Thumb rules of P&ID preparation,PFD to P&ID case study

## PI INDUSTRIES LTD

JAN2023 – APR2023

### INTERNSHIP

*“As an intern, I will explore chemical manufacturing intricacies, gaining hands-on exposure to the production processes of SSF-126 and BPS.”*

- **P&IDs:** learned p&id Development for SSF-126 and BPS processes at PI Industries Ltd, actively participating in understanding and improving operational clarity under senior engineers' guidance.
- **Hira & Hazop:** Participated in Hazard Identification and Risk Assessment (HIRA) studies during my internship, gaining hands-on learning in enhancing safety protocols for SSF-126 and BPS manufacturing. Applied lessons from HAZOP studies to contribute to a safer work environment.
- **Equipment :** Rectores,ANF,Rotarty vaccum dryer,Pumps(centrifugal ,AOD,Reciprocating),Scrubber,PTS,

## GLENMARK LIFESCIENCE LTD

JUN2022 – JULY 2022

### PRODUCTION(INTERNSHIP)

- **OBSERVING:** focusing on observing production processes, BMR, regulatory compliance, and project work in the pharmaceutical industry.
- **Equipment:**Glr,Hpr,Spd, Heat Exchanger

### RELEVANT PROJECTS

**ASPEN HYSYS:** ASPEN HYSYS (Simulation of Steam Engine, Distillation column, Pressure swing Distillation TO Overcome Azotropic distillation, Pump power and efficiency calculations, Petroleum characterization by crude oil assay, Sensible and latent heat and generation of saturated steam table, Crude oil three-phase separation | Decanter simulation, Bubble Point, Dew Point, Phase Diagram)

### OTHER

**Basic Technical Skills:** AVEVA PRO II,ASPEN HYSYS

**Production skills:** Distillation, Distillation troubleshooting, Pumps, Heat Exchangers, Ejectore,Psv