Grace Thibodeaux

Process Controls Engineer

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SUMMARY

Process Controls Engineer with 7 years in chemical and refining plants, supporting DCS, SIS and PLC systems on continuous units. Tunes control loops, owns alarm management and keeps P&IDs and process instrumentation records current. Works across operations, maintenance and process engineering to resolve upsets and improve process dynamics.

SKILLS

- **DCS**
- **SIS**
- **PLCs**
- **Rockwell**
- **Modbus**
- **Process Instrumentation**
- **Alarm Management**
- **P&IDs**
- **PID Loop Tuning**
- **Process Dynamics**

EXPERIENCE

Process Controls Engineer 06/2021 - Present

Mississippi River Chemicals Geismar, LA

Chemical complex with 3 continuous production units.

- Support DCS and SIS systems for **3** units running about 2,800 control loops and 160 safety functions.
- Tune PID loops on reactor and distillation controls, cutting temperature variability 40% and steam use $1.1M a year.
- Manage the site alarm management program, rationalizing 2,100 alarms to bring standing alarms under 10 per console.
- Update P&IDs, loop sheets and SIS documentation after every management of change, closing 90+ MOCs in 2025.

Instrumentation and Controls Engineer 06/2019 - 05/2021

Gulf South Refining Lake Charles, LA

Refinery processing 120,000 barrels per day.

- Programmed Rockwell PLCs for tank farm and loading rack controls, adding Modbus links to 40 field devices.
- Specified process instrumentation for 2 revamp projects, including flow, level and analyzer packages.
- Diagnosed control valve and transmitter faults with operations, reducing repeat work orders by 30%.

EDUCATION

Bachelor of Science 05/2019

Louisiana State University Baton Rouge, LA

Chemical Engineering