



EOSYS®

SUCCESS

STORY

BASF ENVIRONMENTAL CATALYST AND METAL SOLUTIONS - NORTH AMERICA

Safety Upgrade Initiative Overcomes Hardships



OBJECTIVE

Upgrade safety of critical production machines that did not meet safety standards.

APPROACH

Implement safety functions from customer-conducted detailed risk assessment to identify hazards and hazardous situations.

CHALLENGES

This multi-million dollar, highly complex project was consistently impacted by circumstances beyond control that required a fluid approach:

- COVID plant shutdowns came right as project was getting underway
- Unexpected increased production demand impacted upgrade schedule once COVID shutdowns were past
- Extensive supply chain issues caused significant delays in material availability post-COVID



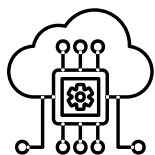
Prior to EOSYS coming onto this project, the controls and automation portion was a mysterious Black Box ... we did not know what to expect. EOSYS worked with our team to clearly define every aspect.



SOLUTIONS

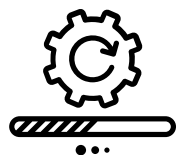


*EOSYS was integrally involved in every aspect of the project and **always conducted work with one eye on overall success.** Issues were resolved with the attitude it was all of us against the problem.*



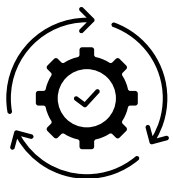
System Architecture

Based on risk assessment results, we defined, designed, programmed, verified and validated all safety functions for each individual critical machine.



Upgrades

Extensive effort required the upgrading of obsolete Micromaster and Master drives to Sinamics G120, and the upgrade of obsolete Simodrive 611Us to Sinamics S120. The safety functions implemented addressed all manner of hazards - robots, laser printers, pneumatic actuators, conveyors, burners, servo-driven actuators, fans, blowers, and pumps through interlocking guard doors, safe-mode control, enabling devices for maintenance control, and code key systems for alternative protective measures.



Constant CI

This multi-million dollar, highly complex project was consistently impacted by circumstances beyond control that required a fluid approach. Through the entire 5-year project period, we focused on consistency to ensure that quality was never impacted, regardless of outside influences; bringing in an extra layer of expertise in our field installation team to lead the efforts to ensure consistency of panel modifications and field terminations.



RESULTS



Uninterrupted Communications

Despite market forces causing delays, driving constant communication with our customer resulted in creative solutions that allowed for the project to continue and move forward, making continuous incremental progress.



Technical Excellence

Through the entire five-year project period, quality never faltered, regardless of outside influences affecting the situation. Maintaining a relentless focus on quality and consistency resulted in not only an exceptional customer relationship that led to additional safety upgrade projects, but also led to the successful implementation of safety upgrades of these critical production machines.



*EOSYS brought an impressive level of technical knowhow and ability and worked to always produce a product that met and exceeded requirements. **Without their skill set, dedication, and flexibility, the project would have suffered delays and cost increases that EOSYS was able to head off before they ever happened.***

ABOUT EOSYS

Leader in Process Industry Systems Integration

For over 30 years, EOSYS has been providing custom industrial integration solutions to the Process industry.

With over \$34M in system integration projects complete in the Chemical industry since 2020 alone, EOSYS is trusted by Fortune 500 companies and major industrials across the United States.



PLATINUM
System Integrator
A ROCKWELL AUTOMATION PARTNER



Tennessean.
EOSYS is a 2024 Top Workplace!
6 Years Running



ABOUT BASF

Global Leader Focused on Creating Chemistry for a Sustainable Future

Focused on combining economic success with environmental protection and social responsibility, BASF operates more than 100 production and research and development sites in North American alone.

 **BASF**
We create chemistry