

CONFIDENCE BEFORE COMMISSIONING

When startup schedules leave no room for error, confidence becomes as important as the technology itself.

For one manufacturer, an aggressive startup timeline meant that any controls issue discovered in the field could trigger costly delays, extended commissioning activities, increased contractor expenses, and potential missed production milestones. Controls engineers needed certainty that their logic would perform as intended, while project leadership faced pressure to deliver on time and within budget. Operations teams depended on a reliable control system to ensure a smooth transition into production.

TESTING REALITY BEFORE REALITY

To help the customer eliminate risk before startup, Apperture Solutions developed a dynamic process simulation environment directly integrated with the control program. Rather than waiting for physical equipment to become available, engineers could interact with a virtual process that responded exactly as the real system would. The team validated normal operations, startup and shutdown sequences, interlocks, permissives, alarms, abnormal conditions, and equipment failures in a safe, controlled environment.

By combining deep process expertise, controls engineering knowledge, and custom simulation development, Apperture Solutions delivered a solution tailored specifically to the customer's operation, not a generic testing platform.

FINDING PROBLEMS BEFORE THEY FIND YOU

The simulation exposed configuration errors, logic flaws, and sequencing issues long before field commissioning began. Issues that would have otherwise surfaced during startup were identified and corrected early, when fixes were simpler, faster, and far less expensive.

As a result, the customer reduced commissioning effort, minimized field rework, and avoided the disruption that often accompanies troubleshooting under intense schedule pressure.

A FASTER PATH TO PRODUCTION

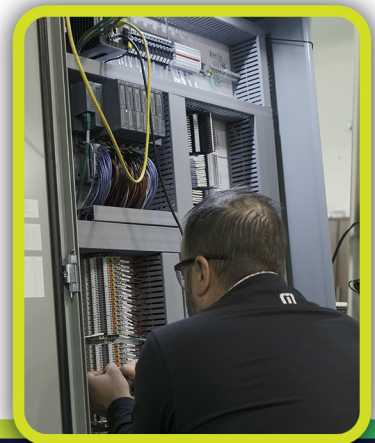
Beyond the technical improvements, the project delivered something equally valuable: confidence.

Engineering, operations, and project teams entered commissioning knowing critical operating scenarios had already been thoroughly tested. Instead of spending valuable startup time diagnosing software issues, they could focus on optimizing process performance and achieving production goals.

THE RESULT: The facility started up **5 days ahead of schedule**, delivering an estimated **\$1.9 million in business value** while meeting critical project objectives.

WHAT COULD YOUR TEAM ACHIEVE WITH FIVE EXTRA DAYS OF PRODUCTION?

Apperture Solutions helps manufacturers reduce startup risk, accelerate commissioning, and deliver operational confidence before a single piece of equipment comes online.



Contact Us and Make A Change Today