

PSA CONTROL SYSTEM RETROFITS

Customized Retrofit Control System Solution

INTRODUCTION

UOP is committed to providing customers with proven control system technology to help ensure the long-term performance and reliability of UOP equipment. UOP proudly offers PSA control system retrofits that provide customers with control systems designed to improve existing operation to meet business goals most efficiently.

KEY FACTS

- Older Modicon Quantum & 984 Series modules are discontinued
- Additionally, Allen-Bradley PLC5 and ControlLogix L5x/6x series modules also face obsolescence
- While some systems are still being supported by the manufacturer, end-of-service dates have been identified
- UOP can provide recommendations for control system retrofits

TECHNOLOGY EVOLUTION

Advancements in technology are common. While control systems are built to meet the physical requirements today, technology evolution continues to improve functionality and performance. Oftentimes, if the control system is running, updates can provide both scalable and flexible solutions to adapt to future modifications your customers may need with their current installation. When that is not possible, customers risk future component obsolescence or system failure over time.

WHY SHOULD YOU RETROFIT?

With the pace of technology advancement, system components are becoming obsolete more quickly than ever before. The UOP control system retrofits have been developed to offer the following benefits:

- Overcome obsolete spare part availability
- Utilize current technology
- Minimize process upsets
- Fully redundant control system hardware and comprehensive fault detection diagnostics
- Helps to maximize process unit on-stream performance

HONEYWELL C300 SOLUTION

Honeywell's C300 is the primary solution UOP recommends for all PSA control system retrofits. If a customer currently has a Honeywell Experion site, the retrofitted control system and graphics will intergrate into existing Honeywell Experion DCS infrastructure. If a customer does not have a Honeywell Experion site UOP can still provide you with a suitable PLC based solution.



FEATURES & BENEFITS¹

- Capacity dependent tuning constants** – Decreases flow and pressure fluctuations at all flow rates; changes PID tuning parameters as a function of adsorption time
- Improved self-tuning control loops** – Control valve with self-adaptive valve intercepts. Prevents issues associated with positioner drift and inconsistent valve calibrations and helps to decrease flow and pressure fluctuations at all flow rates
- Dry-cycle mode** – Simulate run conditions without the presence of process gas; allowing operators to confirm valve operations prior to feed gas introduction
- Preferred switchover logic** – Automatically switches to a step that reduces flow fluctuations relative to all other switchover steps
- Improved valve failure logic** – Logic has been improved to consider pressure monitoring in addition to valve feedback for improved accuracy associated with valve failures
- Tail gas flow control routine** – Helps reduce tail gas flow fluctuations unique to specific PSA operation and cycle
- Enhanced safety features** – Pressure permissive to start the unit and valve output limiting to help prevent damage to equipment
- Improved Operator Interface** – Graphics have been optimized to be user-friendly and display information on modern resolutions. The interface has also been streamlined to be more intuitive for operators

¹All features and benefits associated with control systems are based on Honeywell UOP past projects. Data is generated for customers and based on process data done at the time of unit specific evaluation.

For more information

To schedule a call or an onsite meeting to review your operation and needs, contact us at +1-847-391-2000 or visit uop.com.

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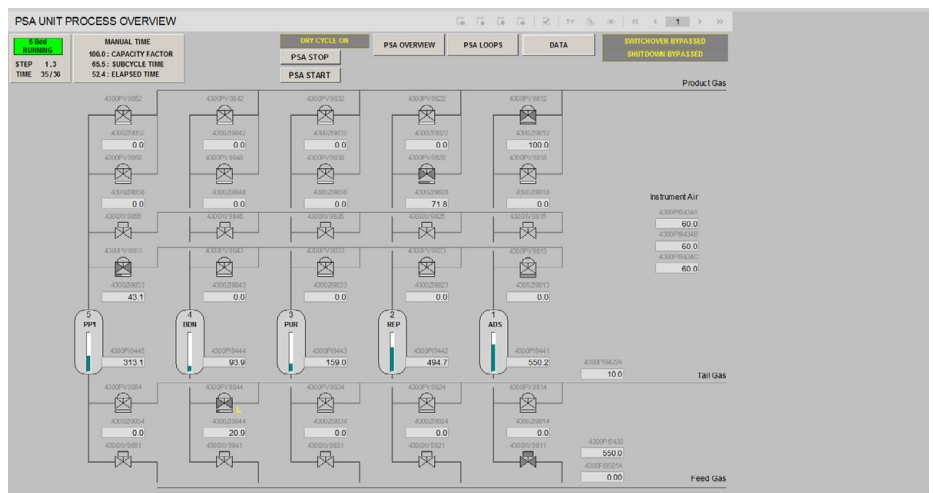
MODULE	DISCONTINUED	SERVICE SUPPORT?
140 CPU 434 12A	Dec 2017	Until May 2023
140 CPU 672 60	Dec 2018	Until Dec 2026
140 CPU 678 61	Dec 2018	Until Dec 2026
Allen Bradley PLC5	Dec 2014	Est. 2033
AB ControlLogix 1756-L55	Mar 2011	Est. 2033
AB ControlLogix 1756-L60	June 2017	Est. 2033

UOP'S SOLUTION

UOP is committed to providing solutions that allow customers to benefit from the latest technology available for their equipment. UOP has installed over 1100 PSA control systems worldwide which typically have performed for over 20+ years of service.

Customers concerned with limited system longevity are encouraged to consider retrofitting or upgrading their current PSA control system to ensure reliable performance. UOP continuously improves our control systems and proactively takes steps to ensure that improvements are implemented in our standard control system design.

UOP's goal is to assist you in managing your upcoming plans and communicating the various options available to keep your systems operating while minimizing downtime.



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