

FIVE SIGNS IT'S TIME TO UPGRADE YOUR HYDROGEN PSA CONTROL SYSTEM



Honeywell
Uop

IS YOUR UOP POLYBED™ PRESSURE SWING ADSORPTION (PSA) CONTROL SYSTEM DUE FOR AN UPGRADE? HERE ARE A FEW SIGNS IT MAY BE TIME.

- 1 Your current control system is outdated or obsolete.** Either the CPU or the I/O (or both) are no longer supported or offered by the manufacturer as spare parts.
- 2 Your current system performance has downgraded.** If your system isn't performing reliably, we can help you diagnose issues and determine if a controller update is the right solution.
- 3 You're looking for a cost-effective solution to increase reliability and availability.** Even a minor control system upgrade can help you gain significant benefits without a major revamp.
- 4 You're looking to upgrade to a more user-friendly interface.** Help personnel be more efficient and effective in their roles with the speed and functionality of a modern control system.
- 5 You're looking for proactive measures to minimize costly shutdowns and/or system failures.** Additional safeguards and redundancy can help you address issues before they have a major impact on operations.

WHY A CONTROLS UPGRADE SHOULD BE YOUR NEXT MOVE

By replacing outdated or obsolete controllers with today's state-of-the-art equipment and software, you can:

- Gain enhanced features, including faster, more high-performance communication, improved diagnostics and a more user-friendly interface.
- Expand system memory to handle more equipment and data with faster, more powerful processors capable of running the latest PSA software.
- Add more operations, alarms and safeguards to your system, including redundancy for critical processes.
- Arm personnel with more effective tools to increase productivity and efficiency.

Replacement can be completed in as little as 12 months with minimal impact to your operations. From design, architecture and PLC component selection to testing, programming and PSA unit performance, UOP can assist with the control system upgrade from start to finish.

Control system failure is not an option.

Contact your Honeywell UOP representative to discuss a customized plan to improve reliability and reduce operational risk.

UOP LLC, A Honeywell Company

25 East Algonquin Road
Des Plaines, IL 60017-5017, U.S.A.
uop.honeywell.com

* The \$370,000 cost is the loss in hydrogen revenue from a existing 89% recovery hydrogen PSA unit with a product flow of 100,000 Nm³/h, using an H₂ price of \$1,700/MT, a standard Steam Methane Reforming Hydrogen Production Unit syngas composition and H₂ purification product specification (H₂ = 99.9 mol% and CO = 10 ppmv).

© 2022 UOP LLC. All rights reserved.

The information in this Honeywell Company document should not be construed as a representation for which UOP assumes legal responsibility, or an authorization or recommendation to practice a patented invention without a license.

FLR-22-23-EN

MONITORING SYSTEM PERFORMANCE IS PARAMOUNT FOR A SUCCESSFUL OPERATIONAL FUTURE.

Every day a 100,000 Nm³/h H₂ PSA unit is not on-stream, it can cost your refinery up to \$370,000.*



Even one unplanned shutdown a year is too many.



Reduce unplanned downtime with a hydrogen PSA control system revamp.

**THE
FUTURE
IS
WHAT
WE
MAKE IT**

Honeywell