# **Honeywell**



Profit® Control and Optimization from Honeywell

# Pursue Profit

Stabilize, optimize, and improve: perfect the process with Profit Control and Optimization.

# All in One

- Multivariable predictive control
- Soft sensor calculations
- Optimization
- Tuning and maintenance
- Performance monitoring.

Profit technologies enable plants to meet the challenges of competitive pressure, regulatory demands and ageing workforces to deliver safer, more reliable and efficient operations. Profit lets you capture knowledge, drive best practice across shifts and sites, and achieve the continuous improvement the operation requires.

### All You Need

Profit's comprehensive platform provides a complete solution for advanced control applications.



Advanced Control Provides Process Stability, Keeping Within Operational and Safety Constraints:

Multivariable process control delivers a safe, stable operation and a solid foundation for plant optimization.



Powerful Optimization for Consistently Excellent Operations:

Profit Solutions safely push

towards the optimal operating point to help you run at peak capacity, while maximizing efficiency and safeguarding assets.



Monitoring for Sustained Performance and Continuous Improvement:

Ensure and improve the health

of the control system and plant with in-depth analysis and full visibility of the entire operation, from basic regulatory control to advanced process control and optimization.

## The Profit Approach

With over 25 years of experience and operation in the field, Profit meets specific needs across a wide range of applications. Providing a modular solution for complex problems, users benefit from fast implementation and a return on investment usually in less than 6 months.

Reducing operating variability, improving throughput, enhancing quality, boosting reliability, reducing maintenance: Profit technologies deliver real results for a better business.

# Complete Control: a Single, Consistent Technology Platform

Profit Technologies combine model predictive control (MPC) with powerful real-time optimization in a suite of products that improve quality, increase throughput, reduce energy, and meet your needs for regulatory loop monitoring, APC monitoring and tuning in a single, consolidated, intuitive solution.

## Flexible and Scalable for Lower Lifecycle Costs

Combining powerful core technology with focused solutions for process-specific problems, Profit Optimization Suite adapts as your needs change. Control the process and control the technology roll-out to meet your requirements and budgetary constraints.

## Faster Results with an Efficient Solution

Profit solutions are easy to use and to implement, with configuration wizards to walk users through setup and achieve rapid returns on investment. Easy to maintain, Profit ensures benefits are sustained over the long term as skill sets and workforce capabilities change.

# Single-Variable Linear Control Seconds Multiple-Variable Non-Linear Control and Optimization Hours/Days Profit CPM (Control Performance Monitor)

# Three Ingredients for Success

Offering a suite of products for multivariable control and optimization Profit delivers robust stability and industry-leading optimization for the biggest and smallest projects.

# Profit APC: Eliminate Variability for a More Stable, Reliable Process

Studies show advanced process control improves uptime. Profit's APC advanced algorithm reduces inefficient operator manipulation and ensures equipment always operates within your defined limits.

Our robust, easy-to-tune controller enables you to capture skilled operators' expertise, drive best practices across the organization and push the process toward consistent, optimum operation.

- A market-leading multivariable control algorithm balances performance, robustness and process economics to minimize costly process movements
- An easy-to-use interface reduces training, encourages operators to use APC and ensures sustained benefits from implementation
- Flexible, configurable control response paths are tailored to your objectives with one-knob tuning and automated matrix ill-conditioning protection for guaranteed robustness
- The lowest cost of ownership, with a modular suite of products and flexible licensing to adapt to your requirements and budget.

# Profit CPM Suite: Monitoring for Sustained Benefits

With Control Performance Monitor, Profit maintains the reliability and efficiency of your process control assets. Advanced analysis technologies provide condition-based monitoring to rapidly identify, diagnose and remedy issues across every plant layer.

A single solution for monitoring regulatory loops, APC and tuning applications, CPM delivers an integrated package for better performance, lower maintenance costs and increased reliability. Improving the operability and stability of the process, CPM reduces off-specification production, operating costs and product variability and maximizes throughput, yields and conversions.

- The industry's most advanced algorithms to diagnose tuning and mechanical issues faster
- Intuitive displays to quickly identify and prioritize problems
- Control performance across remote plant sites
- Reporting and data consolidation for a single facility or enterprise-wide
- Simplified CPM CX with minimized configuration requirements for the regulatory control layer.

# Profit Optimization Suite: Sustained and Higher Profit at Any Scale

For multi-unit and plant-wide dynamic optimization, Profit Optimization offers excellent model-based control combined with a broad optimization scope. Honeywell's unique layered approach enables faster responses to changing business demands and ensures the optimization continually delivers benefit.

Profit allows users to quickly realize real-time optimization benefits without complicated first principles models.

- Global objective function to fully utilize degrees of freedom
- Manage downstream throughput constraints to maximizes coordination between upstream and downstream units
- Span multiple units within the process to improve overall plant control
- Accommodate both steady state and dynamic optimization schemes
- Effective even with weak and uncertain models
- Flexible licensing offerings to maximize ROI.

## **Leaders in Control and Optimization**

Honeywell's Profit Technologies are used in more than 500 major processing units and over 3,500 control applications worldwide. Over the last two decades, we have provided customers with combined advanced control and optimization benefits exceeding US \$5 billion. Honeywell customers include the biggest names in oil and gas, refining, pulp and paper, mining and materials, and chemicals.

All Profit software is supported by a robust and transparent development roadmap, guided by customer feedback. Combining market leading software and in-depth expertise, Honeywell also offers full services and support throughout the lifecycle. A true partner for your business, our worldwide network of local support combined with Six Sigma processes ensure we complete and implement projects faster.

Whether it's engineering support, optimization advice, training or maintenance programs, Honeywell has the experience, resources and technical experts worldwide to get the most from your software investments. Contact us to learn how we can help deliver more efficiency, more reliability, more performance—more Profit—to your operation.

Profit® is a registered trademark of Honeywell International, Inc.

## **For More Information**

To learn more about Honeywell's Profit Control and Optimization technologies, visit www.honeywellprocess.com or contact your Honeywell account manager.

# **Honeywell Process Solutions**

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