NAPCON

OPTIMIZER

NAPCON Optimizer maximizes profit directly through plant-wide economic optimization. NAPCON Optimizer is based on dynamic real-time optimization concept, a state-of-the-art optimization technology, and thus is an ideal solution to ensure competitiveness at any market situation.

MAIN FEATURES

- NAPCON Optimizer offers superior profit maximization performance.

- NAPCON Optimizer maximizes production profits by economic optimization and coordination of existing Advanced Process Control applications provided either by NAPCON or other vendors.

- Optimization is carried out within the envelope set by current process constraints and is continuously performed both during steady-state and process transients. The typical optimization execution cycle is 1 to 2 minutes.

- Allows flexible prioritization between economic optimization, control targets and constraints.

MAIN BENEFITS

- Maximizing profit through plant-wide production optimization which operates on a minute basis and considers product prices, raw material and utility costs.

- Early start, early cash flow, fast track implementation of the most beneficial part of the delivery scope.

- Vendor independent solution allows utilization of existing advanced process control (APC) applications.

NAPCON Optimizer maximizes production profits by economic optimization, whose result can be conveniently monitored and reported through NAPCON APC Dashboards.

USABILITY AND CONFIGURATION

- NAPCON Optimizer features integration with process oriented packages, including distillation, polymer production and compressor calculation packages for full scale profit maximization.

- NAPCON Optimizer flexibly handles varying raw material and product grades under unlimited process variables and optimization horizon length.

- Models used by NAPCON Optimizer are identified with NAPCON Modeling Tool with just a few clicks. For maximum robustness of optimization models, NAPCON Modeling Tool features regularization, variable bounds and partial model identification. If needed, Modeling Tool, provides tools to remove outliers and other undesired data features.

- Maximum performance of NAPCON Optimizer is ensured by NAPCON Model Validator. Model Validator continuosly analyzes the quality of model predictions and alerts user, should model accuracy degrade.

- NAPCON Controller Configuration Tool offers easy configuration process of both NAPCON Controller and NAPCON Optimizer which is facilitated by an intuitive user interface

- NAPCON APC Dashboards provide extensive reporting and visualization capabilities for economic optimization performance reporting and monitoring. Flexible Dashboard architecture allows a straightforward addition of user defined KPIs to meet any demands for the detail level of an economic performance report. Dashboard is based on the latest web technology and offers full customization of the UI elements for great usability

- NAPCON Optimizer supports full integration with NAPCON Analytics, a powerful calculation and reporting platform whose features allow to:

  - create on demand calculations and data visualization with a web application to be used for analytics, monitoring, big data, etc.

  - support for 3rd party data analysis libraries

Models for optimization are identified with NAPCON Modeling Tool with just a few clicks.

NAPCON Controller Configuration Tool featuring intuitive user interface offers easy configuration process of NAPCON Optimizer.

COMMUNICATION

- The communication between NAPCON Optimizer and underlying controllers is run through NAPCON Informer which is OPC UA certified database that enables reliable and secure operation of NAPCON Optimizer.

- Using NAPCON Informer and OPC UA interface several controllers can be linked to NAPCON Optimizer, also from other vendors.

OPERATIONAL SAFETY AND RELIABILITY

- NAPCON Optimizer undergoes rigorous automatic testing process before deployment at the client site.

- NAPCON Informer goes above and beyond to ensure the reliable operation of NAPCON Optimizer and provides:

  - Excellent scalability with high data throughput

  - Wide support for security features: Encrypted OPC UA communication, Antivirus software, Whitelisting, User identification, Encrypted data transport, Certificates

NAPCON PRODUCTS

UNDERSTAND

NAPCON Understand solutions will turn the data provided by your plant into relevant information that help optimize your company's production.

NAPCON Informer
NAPCON Analytics

IMPROVE

NAPCON Improve solutions will bring out the maximum potential of your operations and help you ensure that your investments meet your strategic goals.

NAPCON Controller
NAPCON Optimizer

TRAIN

NAPCON Train solutions will bring the real life plant into the virtual world, making training operators and testing the limits of your plant safe and exciting.

NAPCON Simulator
NAPCON Games

DECIDE

NAPCON Decision support enables you to make the right decisions, even in complex conditions.

NAPCON Energy Performance
NAPCON Performance Analysis
NAPCON Flow Dynamics
NAPCON Business Optimizer

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