



NAPCON IMPROVE

By considering the overall production optimization and capacity, NAPCON Improve solutions bring out the maximum potential of your operations.

NAPCON CONTROLLER
NAPCON OPTIMIZER



GET THE RESULTS YOU REALLY DESERVE.

NAPCON continues where human capabilities
end. We use artificial intelligence to help you find
and utilize powers you didn't know existed. With
NAPCON Improve solutions you can ensure that
your investments will meet your strategic goals.



USE NAPCON IMPROVE SOLUTIONS FOR



Get more with what you got. NAPCON maximizes production rates and simultaneously minimizes the production costs by selecting the most profitable product based on the market price and situation.



Never settle for nothing but the best. We make sure that the quality of your products is always the utmost optimal. NAPCON will keep you in balance: it helps you reach maximum profits and minimum costs without compromising on your quality targets.



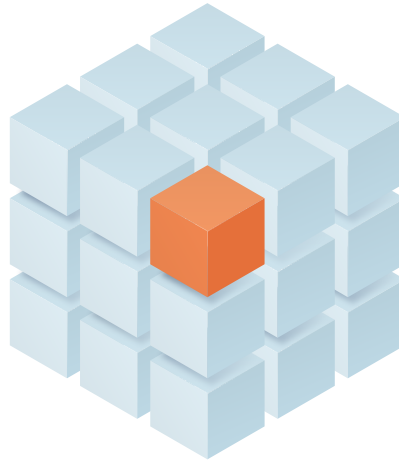
Modern sustainable business takes into account all environmental aspects of the production. NAPCON supports this goal by providing several ways to minimize the environmental impact of the production. We help you succeed, but never at the expense of the nature.



Increased productivity, decreased use of energy. Thanks to real-time optimization, NAPCON can help you boost your energy efficiency while simultaneously reducing waste.

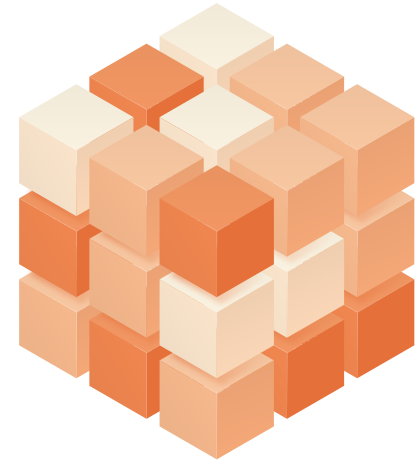
THE DIFFERENCE BETWEEN NAPCON CONTROLLER AND NAPCON OPTIMIZER

NAPCON Controller and NAPCON Optimizer both increase productivity, but their areas of operation are different. NAPCON Controller controls one specific process unit, whilst NAPCON Optimizer optimizes production in a more holistic way.



NAPCON CONTROLLER Although based on Advanced Process Control (APC), NAPCON Controller is more than a mere software - it is a holistic solution for tackling a specific challenge in the production process. The NAPCON Controller is installed to control a certain process unit, where it is able to regulate wanted characteristics of the end product (e.g. humidity), decrease product variability and increase production.

NAPCON OPTIMIZER is ideal for plant-wide production optimization. It covers all APCs and utilizes



Dynamic Real Time Optimization to conduct them, making it at least 30 times faster than traditional Real Time Optimizers. NAPCON OPTIMIZER enables you to choose certain holistic optimization targets that best suit your market situation: maximize production throughput, minimize utility costs and optimize your raw material usage. NAPCON Optimizer will then consider the price of raw material, your production line's utility costs, and the selling price of the end product - and generate maximum profit.



NAPCON CONTROLLER

PUTS ALL YOUR

POTENTIAL TO USE.

NAPCON Controller monitors your production continuously
and commands the systems to reach maximum results.

Maximizing production rate no longer means compromising quality or energy efficiency - NAPCON Controller allows you to maximize production rate, whilst simultaneously optimizing produces' quality and maximizing energy efficiency. Reach new heights in product rate, yields and quality with this state-of-the-art technology!

We guarantee the best possible return on your investment, fast implementation and short payback time.

Our experts are at your service around the clock, keeping your process stable and in a safe operating window 24/7.

NAPCON Controller includes an advanced monitoring and reporting system, making it an excellent tool for indicating process bottlenecks, which require separate actions to increase production capacity.

NAPCON CONTROLLER KEY FEATURES

ADAPTIVE

Due to the built-in robust control method, our solutions react immediately to any changes in production conditions.

WIDE APPLICATION AREA

Due to its wide application area, NAPCON Controller handles all process behaviour and difficult process dynamics elegantly.

FLEXIBILITY

NAPCON Controller's outstanding flexibility allows smooth transitions between product grades and feedstocks.

SCALABLE

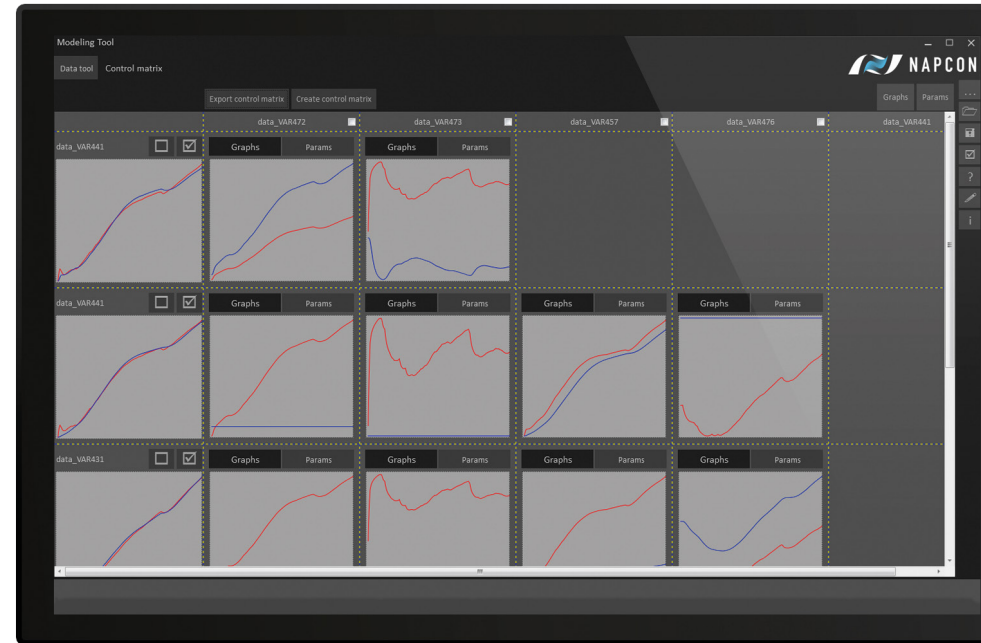
NAPCON Controller is of a scalable and modular design, allowing easy expansion from single unit to multi-unit control, to support your investment and expansion programs.

CONFIGURATION AND MODELLING TOOLS

NAPCON Controller Configuration Tool and NAPCON Controller Modelling Tool allow fast and straightforward configuration and modelling processes.

STAY UP-TO-DATE

NAPCON Controller features an APC Dashboard, which is an advanced and fully customizable performance monitoring and reporting system, based on the latest web technology.





SUBSTANTIAL BOOST TO PRODUCTIVITY WITH NAPCON CONTROLLER.

In 2013, Valio installed NAPCON Controller to their whey powder production line. Due to excellent results of increased productivity and decreased variations in product quality, Valio decided to napconize also their milk powder production line in Seinäjoki.

With the help of NAPCON Controller, Valio managed to boost the production by more than 10% without any increase in energy consumption. Valio can now predict the moisture content and optimize the humidity in real time, keeping the composition of the final powder product very close to its target value.





REACH NEW HEIGHTS WITH NAPCON OPTIMIZER.

NAPCON Optimizer gathers data from the plant and uses it to run the equipment in the most optimal way, resulting in better efficiency and more consistent quality.

NAPCON OPTIMIZER BENEFITS

MAXIMIZED PROFIT

Plant-wide production optimization maximizes profits by taking into account product prices, as well as raw material and utility costs.

EARLY START, EARLY CASH FLOW

The most beneficial part of the delivery scope will be implemented on a fast track.

VENDOR INDEPENDENT

NAPCON Optimizer can be built on existing Advanced Process Control (APC) application from any vendor.

AVOID SUB-OPTIMIZATION

Plant-wide optimization makes sure that all process units operate towards common goal and there is no sub-optimization creating unwanted bottlenecks or costs.

STAY UP-TO-DATE

NAPCON Optimizer includes an advanced monitoring and reporting system, making it an excellent tool for indicating process bottlenecks, which require separate actions to increase production capacity.

NAPCON OPTIMIZER KEY FEATURES

EASY IMPLEMENTATION

A steady state is no longer a requirement for implementation, as high frequency Real-Time Optimization (RTO) continuously optimizes the process on a minute basis.

FLEXIBLE TARGET SELECTION

NAPCON Optimizer allows you to select targets that suit your market situation best; maximize production throughput, minimize utility costs or optimize your product grade selection.

EASILY IMPLEMENTABLE INTERFACE

NAPCON Optimizer functions on a standardized, modern and secure OPC UA interface, making it implementable on any platform.



NAPCON OPTIMIZER PRODUCES EXCELLENT LONG-TERM RETURN.

NAPCON Optimizer was taken into operation at Borealis by the end of 2004. For the first operational year with NAPCON Optimizer, Borealis recorded a profit increase of 12.5 million USD per annum. This was enabled by NAPCON Optimizer's capability to gather real-time information from the plant, and then run the equipment accordingly. After 8 years, the profit increase had reached an impressive amount of over 100 million USD. And what's more; Napconization has also fueled up the production of ethylene by an annual 9%.



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

HEAD OF SALES AND
MARKETING, NAPCON:
Jaakko Nauha
jaakko.nauha@neste.com
+358 50 458 7534

www.napconsuite.com
napcon@neste.com
+358(0)10 458 1200

