

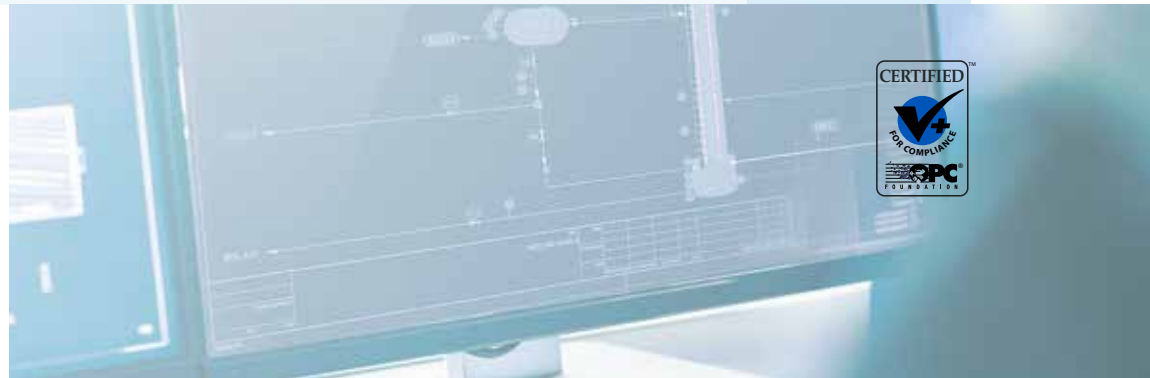


# NAPCON TRAIN

NAPCON Train solutions bring your  
real life plant into the virtual world taking  
operator training to a whole new level.

## NAPCON TRAIN

- NAPCON GAMES
- NAPCON SIMULATOR





## NAPCON TRAIN



### NAPCON GAMES

Make training fun, educative and meaningful with unique portfolio of NAPCON Games.



### NAPCON TRAIN CONSULTING SERVICES

Make smart training investment decisions with our experts services.



### NAPCON TRAIN PLATFORM SERVICES

Ensure zero downtime, maintained and always updated training environment.



### NAPCON SIMULATOR

State of the art portfolio of customized NAPCON Simulator, Engineering Simulator, Cloud OTS and Lite OTS.



### NAPCON LEARNING PATH

Organization wide competence development and assessment solution.

## NAPCON TRAIN

NAPCON Train solutions are combination of modern training products and services to meet your plant personnel training needs. With NAPCON Train solutions you can create a digital learning environment that adapts to the users' needs from basic principles to safe and specific operating skills. Planning a suitable and smooth training solution requires a lot – we have the knowledge and experience.

NAPCON Train portfolio consists of NAPCON Learning Path with NAPCON E-learning, NAPCON Games, NAPCON Simulators, NAPCON Consulting Services and NAPCON Train Platform Services.

**NAPCON TRAIN PLATFORM SERVICES** takes care of software and hardware needs and keep your training facility always up and running.

**NAPCON EXPERTS** have deep understanding of training needs. With combination of thorough analysis, we offer customized training that can lead operators training to a new level.

*"I like NAPCON Training games. It is a low-stakes and fun opportunity to better understand distillation and the kind of upsets that happen in industrial settings. I think it would be very useful to our students to practice real-life phenomena in a simulation such as this"*

J. Douglas White, P.E., Senior Lecturer,  
Texas A&M University, Artie McFerrin Department of Chemical Engineering.





*"We have a long relationship with NAPCON in developing games for operator training. They have managed to combine their extensive process industry experience with gamification – making our operator training more effective."*

Esa Tamminen, Senior Process Specialist, Neste Oyj

## NAPCON GAMES PORTFOLIO

Gamification is an unbeatable way to make training more meaningful, fun and educative. NAPCON Games increases learning motivation and supports operators' development with professional training games.

### MODERNIZE YOUR OPERATOR TRAINING

Utilize gamified training to boost plant operating skills. Engage not only your plant operators but all plant personnel to improve their competencies to the next level with motivational digital training. Make the training a whole lot more enjoyable, efficient and motivating with gamified solutions.

- **Gamify your training** – Training with games is a flexible way to practice operating skills and level up competencies through games.
- **Challenge your operators** – Challenge your operators to solve fault problems in an efficient and exiting way.
- **Level up your plant competence** – Gamified training offers efficient solutions for younger generation operators. We lead you to a digitalized path of training systems, starting with gaming.
- **Drive behavioral change** – Drive the change in the behavior by modernizing operator training through NAPCON Games.
- **Practice real-world problems** – Prepare yourself by gaming for different situations that you don't face in everyday work.

### DISTILLER



NAPCON Games Distiller is a modern extension to traditional classroom operator training. With NAPCON Games Distiller, your operators are able to learn new or enhance their existing skills in industrial distillation in an oil refinery.

### BOILING



NAPCON Games Boiling is new generation operator training game which allows the operator to test their skills how circulation works in a thermosiphon reboiler.

### HEAT TRANSFER



With NAPCON Games Heat Transfer, your operators are taught phenomena of evaporation and condensing and superheating of steam, how is it done and what happens.

### FURNACE



NAPCON Games Furnace is a simulation based learning game. With NAPCON Games Furnace, your operators are able to learn independently industrial process furnace principles and operating.

### CONDENSING



NAPCON Games Condensing is new generation operator training game which teaches the operators the differences between partial condenser and a total condenser.

### FLUIDIZED CATALYTIC CIRCULATION



NAPCON Games Fluidized Catalytic Circulation is training game which trains operators about complex operations of one of the most important conversion process in refinery industry: Fluidized Catalyst Cracking.

## FUEL BLENDER



NAPCON Games Fuel Blender allows the player to test their skills in fuel blending and learn about the different components that go into a specific fuel mixture. NAPCON Games Fuel Blender is a mobile game, which can be downloaded for free to give a hint of what NAPCON Games products can offer.

Free download from Google play and App Store!



## CUSTOMIZED LEARNING GAMES

NAPCON Games offers custom-made training games that can be tailored for particular process and educational needs. Tailored made NAPCON Games are designed for your special needs and are plant specific contents to the client organization.

## NAPCON GAMES MAIN BENEFITS

### COST- EFFICIENCY

NAPCON Games are cost-efficient tools for complementing other training methods, such as specific theoretical lectures.

### FAST AND EFFICIENT LEARNING

Gamification is an unbeatable way to make training more meaningful. NAPCON Games, a series of highly advanced training games turn work to play and play to work. NAPCON Games, is an efficient method for on-boarding newcomers and strengthening the skills of more seasoned experts.

### INDEPENDENT LEARNING

To support in class learning. By filling the gap between theory and unit specific training it allows the player to learn the fundamental principles in a gamified learning environment before moving to work with complex real life process.

### FUN AND EFFECTIVE

Features-Micro-learning with instant feedback that makes it fun and effective.

### ACHIEVEMENTS

Motivate the player to play NAPCON Games week after week.

### REALISTIC PROCESS SIMULATION

With dynamic process modelling software by NAPCON. Process is modeled using first principles physical-chemical models, extensive chemical components and properties library and rigorous calculations.





## NAPCON SIMULATOR PORTFOLIO

NAPCON Simulator is a highly interactive training simulator that turns your plant into a safe training environment. It offers challenging and motivating training for both beginners and experts.

NAPCON Cloud OTS supports multi-user online training and location independent remote learning by having simulators in the cloud.

*" With NAPCON Simulator we can rehearse possible disturbances cost effectively, improve operative know-how and enhance plant productivity. We want to ensure that refinery operations are safe and effective under any conditions and consider that acquiring a NAPCON Simulator supports achieving these targets in an excellent way."*

Risto kemi, Simulator development coordinator, Neste Oyj





### NAPCON SIMULATOR



NAPCON Simulator is a custom made, state of the art simulator that offers:

- the production line wide teamwork training for operator shifts and has several operator training applications that cover process phenomena and all process equipment.
- It consists of modern Instructor functions with easy-to-use graphical interface for introducing various faults and disturbances for training scenarios.
- NAPCON Simulator is available with both generic and DCS vendor specific emulated operator displays (Human Machine Interface).

### NAPCON ENGINEERING SIMULATOR



NAPCON Engineering Simulator enables using the simulator for conducting dynamic engineering studies along with the control system configuration.

Few of many assessments that can be done via NAPCON Engineering Simulator are:

- What-if Scenarios
- Control Strategy Assessment
- Optimization strategy assessment
- Operational procedure assessment

### NAPCON LITE OTS



NAPCON Lite OTS is a generic level simulator that offers a possibility to train plant personnel on particular technology or on a process without going to the specific process plant details.

### NAPCON CLOUD OTS



NAPCON Cloud OTS platform enables global and location independent use of NAPCON Simulator through the Azure cloud.

- Provides possibility to do training equivalent to classroom based training that supports multi-user sessions
- Powered by cloud computing capabilities and NAPCON Simulation Software Suite
- Hardware Independent and Cyber Secure by nature
- Highly scalable and flexible environment

## NAPCON SIMULATOR MAIN BENEFITS

### SAFETY

NAPCON Simulator improves plant asset safety. Plant operators and engineers can be trained in risk free environment on how to respond during upset conditions to reduce incidents.

### PROFITABILITY

Increased plant availability, enhanced asset performance as well as safe and reliable plant operation due to improved operator skills.

### CONFIDENCE

Personnel can work professionally under pressure and solve problems efficiently. The simulator provides true value for beginners as well as for the most experienced engineers and operators.

### LIFE CYCLE

NAPCON Simulator provides a possibility to validate engineering design, test plant controls and provide state of art training by modern and continuously maintained training simulator that ensures the learning environment evolves together with the actual plant.

### FLEXIBILITY

Cloud services provide easy to scale virtual training rooms and location independent access. Cloud and/or In-premises operator simulator allows for a highly realistic training experience with easy scalability.

### ENHANCEMENT

Allows to identify improvements in actual plant operability as well as in the automation system.

### EARLY START

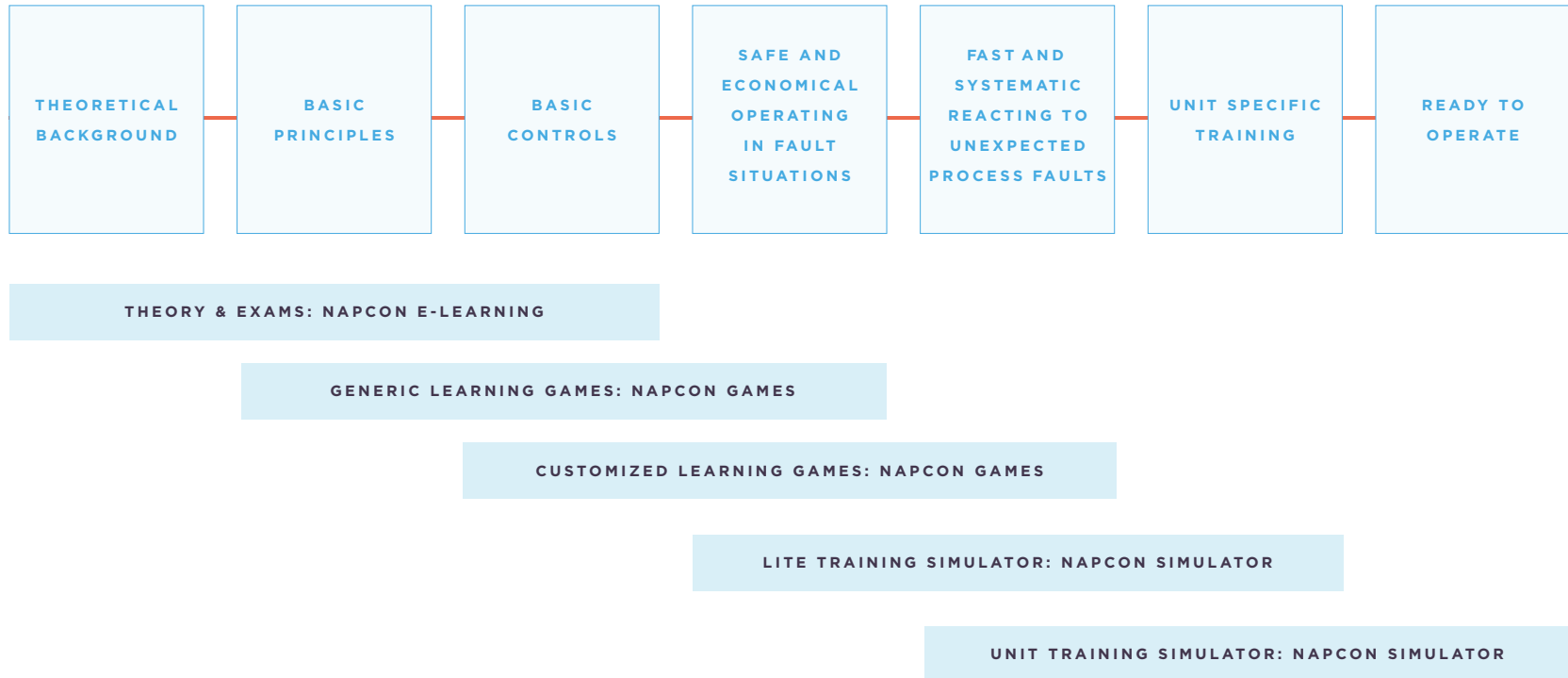
NAPCON Simulator provides possibility to replicate and assess the operational readiness of plant assets long before they are applied in real-world production scenarios.

# NAPCON LEARNING PATH LEADS TO BETTER PERFORMANCE LEVELS AND SAFER OPERATION

NAPCON Learning Path is an organization wide competence development and an assessment solution which is a combination of NAPCON E-learning, NAPCON Games and NAPCON Simulator that ensures and certifies your plant personnel to be ready to operate your assets. It is one of the most effective digitalized learning paths for efficient training of plant personnel in process industry. NAPCON Learning Path leads to better performance levels and safer operation which in turn leads to increased business



## OPERATOR LEARNING PATH WITH NAPCON TRAINING SOLUTIONS



## NAPCON WAY OF TRAINING



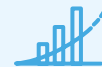
NAPCON Train Consulting Services supports you in making smart investments by helping you evaluate the needs of process industry training, and consults you on parts of training that are critical to invest in. Our experts not only help you finding answers to your questions related to training but also help you plan steps to improve life cycle of your operator training system.

NAPCON Train Consulting Services plays crucial role in specifying training needs and then developing customized training products and services to best match your needs. Our consultants support you all the way from making evaluation, developing plan for your training process and finally developing whole new and customized training system for your plant operators and engineers.

### OUR MAIN SERVICE OF CONSULTING INCLUDES:



Status survey of your current training system for plant personnel.



Support for your decision making and advice what part is critical to invest in.



Plan for training system renewal.



## NAPCON TRAIN SERVICES

NAPCON Services give our experts to your service, ready to ensure that training your plant personnel is as effortless and efficient as possible. We offer state-of-the-art maintenance and development services for both the software and the hardware to ensure that the learning environment evolves together with the actual plant and has very low downtime.



## NAPCON TRAIN PLATFORM SERVICES PROVIDES

### SIMULATOR MAINTENANCE & DEVELOPMENT SERVICES

This service guarantees that your NAPCON Simulator has latest versions of NAPCON software suite and the simulation models are always close to real plant state.

### HARDWARE MAINTENANCE SERVICES

Our maintenance service ensures that hardware related to training environment are always updated with required specifications. This gives you the best training experience and minimizes the downtime of your training facility.

### CALL DESK SERVICES

This service allows you to contact our experts directly in case you need technical support or if you face issues with NAPCON Train solutions. Our service desk experts will provide you information and solve your problem remotely or on site.

## BUSINESS ADVANTAGES OF NAPCON TRAIN

### BENEFITS

The payback period for NAPCON Train solution can be as low as few days. Some of the many Business benefits of NAPCON Train solutions are:

- Reducing project delays during plant commissioning and start-up.
- Maximize return-on-investment in personnel training.
- Helps to keep the knowledge if experienced operators retire, which is important for plant performance.
- Higher profitability by higher utilization of the assets ensuring safer operations.
- Well-trained employees perform better which in turn helps in improving bottom line.
- Evaluate and qualify new operators for start-ups and operating existing plant.

### KNOWLEDGE SHARING

A high percentage of workers in oil & gas industry are about to retire in the coming years. This increases the demand for transferring decades of expertise and knowledge to new employees. The change can be driven by using NAPCON Train solutions.

NAPCON Train solutions presents a training methodology that helps the next generation of workers to attain the required knowledge and keep them engaged. It provides them with state-of-the-art training tools that not only speed up the training time but also help in boosting their careers.

### IMPROVED PLANT OPERATIONS

Reduced plant opex and other maintenance costs with better operated plant.

Improved energy efficiency and sustainable operations with well trained plant personnel.

### LIFE LONG LEARNING

NAPCON Train solutions are modern state-of-the-art training solutions that help to enhance training needs.

Our solution sustain lifelong learning by improving operators knowledge, skills and competences.

# ALL WORK, ALL PLAY.

For more than a decade, NAPCON has looked for ways to renew training methods. *Our modern solutions make training your staff not only totally risk free, but also efficient and exciting.*





#### UNDERSTAND

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

NAPCON Informer  
NAPCON Analytics



#### IMPROVE

NAPCON Improve solutions will bring out the maximum potential of your operations and helps you to 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

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