



**"We save both energy, water, time and chemicals!"**

## CASE STORY

### Nova InSight

Intelligent CIP Data Analysis and Optimization

Graasten Salater is owned by Stryhns Gruppen, which is owned by Norske Agra - with operations in Norway, Sweden and Denmark.

Today, Stryhns Gruppen owns the brands Stryhn's Leverpostej, Graasten Salater, K-Salat, Langeländer Pølser and Jensens Køkken



### Food safety

As an acknowledged producer of pâté, dressings and side salads, food safety is high priority at Graasten Salater. Quality and safety must never be compromised.

At the same time, Graasten Salater is targeting a sustainable production for the benefit of the environment and the climate.

### Sustainability - global goals

But how to ensure a sustainable optimization of the cleaning processes in the production - including CIP-processes which provides savings on energy, water, time and chemicals - without compromising on food safety?

Graasten Salater has in cooperation with Novadan implemented Nova InSight, which is Novadan's intelligent CIP Data Analysis and Optimization tool for the different phases of the CIP-process (cleaning, disinfection and rinsing).

Today, Nova InSight has become a useful tool for Graasten Salater. The system ensures that savings on energy, water, time and chemicals go hand in hand with food safety, og Nova InSight contributes to meeting a sustainable development as part of the UN's 17 global goals.

As a matter of fact, it has become possible to document - through data collection - that every single CIP-process has been running optimally, and it is possible to take action in case deviations are registered.

## How does Nova Insight work?

Nova InSight collects data such as flow, temperature, conductivity, pH, energy consumption etc through tags in PLC from the CIP process and these data are logged in the system and can be accessed online and thereby be evaluated and reported.

By means of Nova InSight, the process in the CIP-system is surveilled right down to the smallest detail and is graphically displayed for user-friendly coding of the result. This reveals if the process or parts of the process is not running optimally, thus any deviations on parameters can be corrected immediately.

## Implementing at Graasten Salater

In the implementation phase at Graasten Salater an overview of the production plant was formed - that includes pipes, tanks, pumps, valves etc. which is used for production of dressings, ketchup, remoulade etc. The system was afterwards programmed and tailored to the company and tests and training in the system was carried out. Finally, Graasten Salater was able to use Nova Insight and take advantage of its benefits.

- Pre-rinse**  
Discharge to sewer
- Alkaline**  
Alkaline CIP
- Rinse**  
Rinse off alkaline residues to sewer or recycling
- Acid**  
Acidic CIP
- Rinse**  
Rinse off acidic residues to sewer or recycling
- Disinfection**  
Disinfection processes
- Final rinse**  
Rinse off disinfection



Technical Senior Project Manager  
Jesper Tandrup states:

*"The more effective cleaning means more production time and less down-time for the benefit of the production time. Besides, we are very satisfied with the reduced CO2 footprint and the reduced total costs that we have registered"*

## On the way to climate neutrality

Sustainability is high on the agenda at Graasten Salater and ambitions are to achieve climate neutrality through out the supply chain in 2050.

Without implementation of Nova Insight it would not have been possible to uncover all CIP-deviations and to optimize and correct all errors in the control system. Now it is avoided to run a new CIP which increases the consumption of electricity, water and chemical which would impact the CO2 footprint and costs.

Today, it is therefore possible to ensure, down to the smallest detail, that all CIP-processes run with optimal consumption and it is a step towards climate neutrality.



### CIP

CIP - Cleaning-In-Place is an automated method to clean the inside of pipes, tanks, equipment, filters and associated fittings without disassembly.

CIP is commonly used for equipment such as pipes and tanks.

CIP uses turbulent flow through pipes and spray to larger surfaces.