



Diverclean Sonic

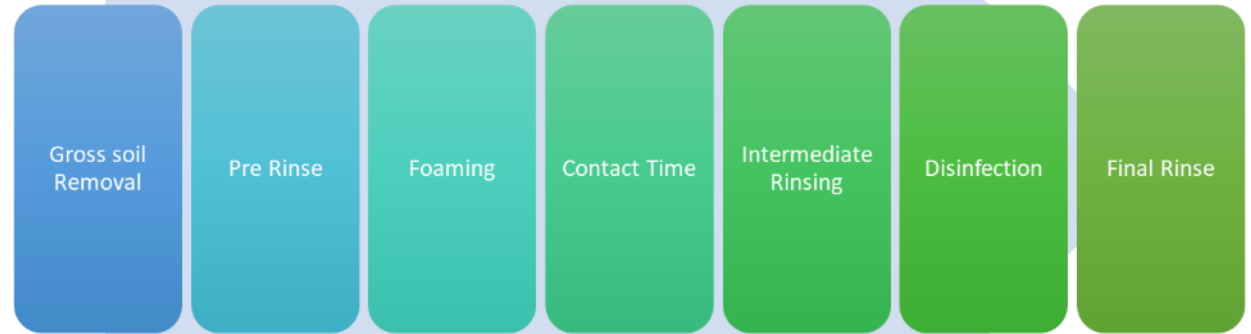
Re-thinking the open plant cleaning process



DiverClean
Sonic

Re-thinking OPC

Also, Open Plant Cleaning has been unchanged and unchallenged since...forever, sticking with the standard procedure





DiverClean
Sonic

*"The Manager accepts the
Status Quo; the Leader
challenges it"*

W. Bennis

LESSONS IN MAINTAINING THE STATUS QUO

with

G. Monty Burns





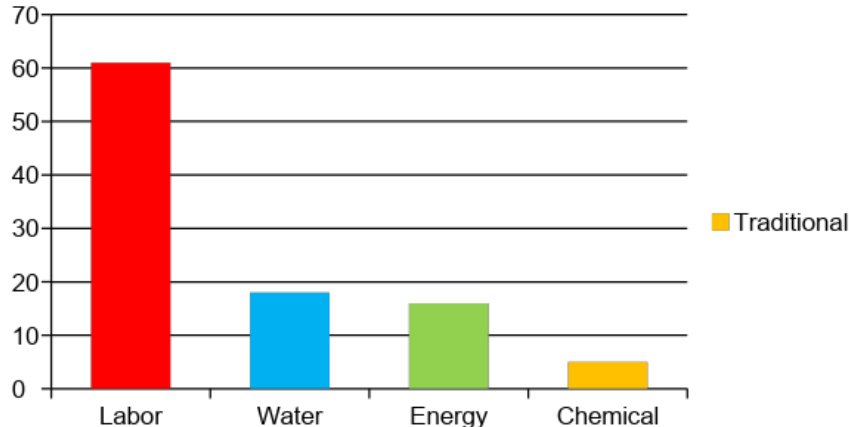
DiverClean
Sonic

Cost parameters in Open Plant Cleaning

Labor
Water consumption
Energy consumption
Chemical consumption

Total cost of operation (TCO)

Typical cost distribution for traditional foam cleaning



Traditional foam cleaning methods are more or less unchanged the last 20 to 30 years.





DiverClean
Sonic

Re-thinking OPC

Provided that Food Safety is a key value driver across Processed Food, TCO related KPIs are as equally important as for all the other sectors.

Diverclean Sonic enables a new approach to OPC for heavily soiled areas that will facilitate **substantial TCO savings** while **maintaining if not improving an excellent degree of Food Safety** and having a **positive impact on the sustainability profile** of the overall application.



**FOOD
SAFETY**



**OPERATIONAL
EFFICIENCY**



SUSTAINABILITY



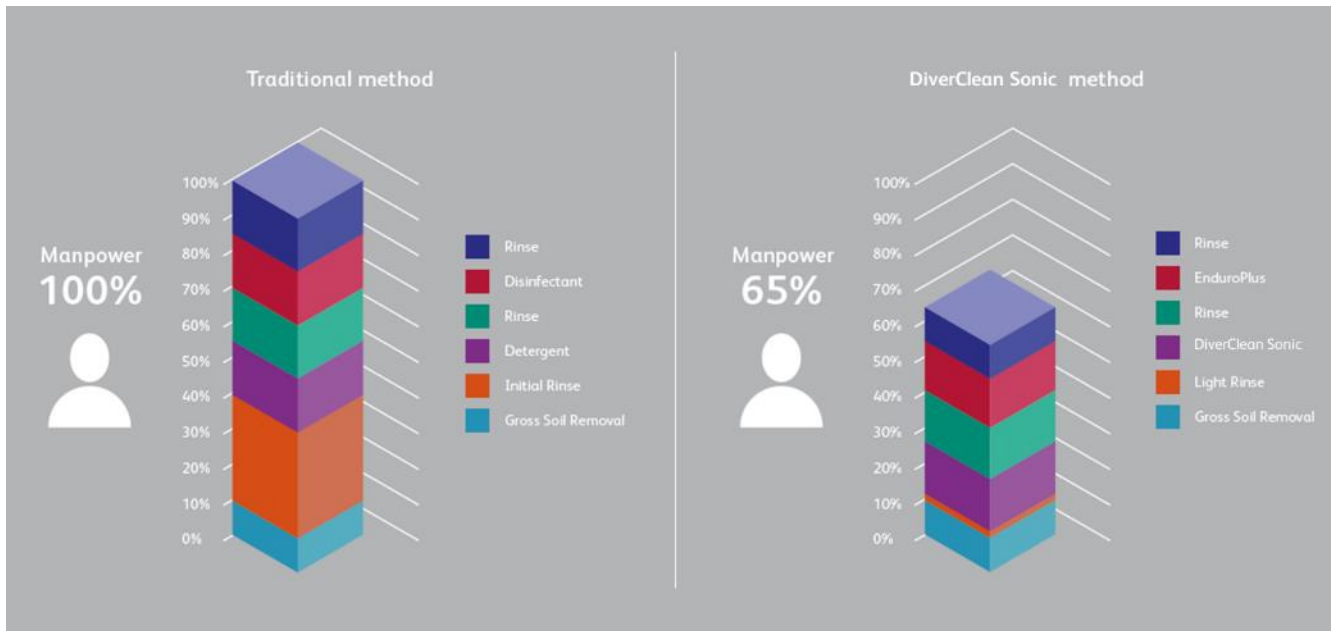
DiverClean
Sonic

Re-thinking OPC

Traditional OPC method

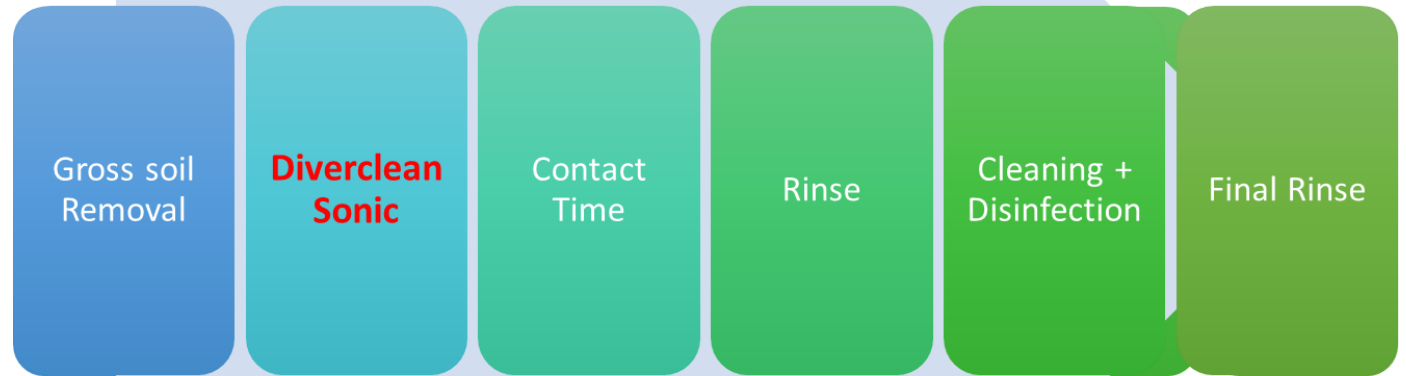


Diverclean Sonic method





DiverClean
Sonic





DiverClean
Sonic

Target Segments

Customers with heavily soiled open plant areas (red meat, poultry and fish)
looking for cost savings on manpower (time), water and energy



Enduro Timesaver Diverclean Sonic

Assignment



Implementing ETS/Diverclean Sonic method to improve cleaning quality while reducing utility costs. This customer was looking to decrease the cleaning time to improve the quality of the working environment (humidity was too high) at the start of production)

Description

1. Pre-foaming with this new product is a simple yet revolutionary change in the open plant cleaning procedure that challenges decades of traditional cleaning with pre-clean technology
2. The pre-clean technology relishes heavily soiled areas – tackling protein, fat and tallow soils to significantly reduce the requirement for a long pre-rinsing step.
3. This results are: 1. reduction of time; 2. water and energy; 3. better cleaning performance. These results will also enhance the customers sustainability goals.
4. Diversey's Experts will support the cleaning staff to implement this new technology.

Outcome

ETS/Diverclean Sonic



**Saving of 11 man
hours cleaning
time per day**



**COST
REDUCTION**

Total Savings of

**> 15% on labor
costs and water
and energy savings
(not measured)**



**OPERATIONAL
EFFICIENCY**

**Reduction cleaning
Time, improved working
environment, other
savings**

Project

Country	The Netherlands
Plant	Red Meat
Production Type	Meat Processing
Area	Open Plant Cleaning
Year	2019/2021
Client Team	Plant manager, Prod. Manage, QA
Diversey Team	Jos in den Haak, Hans Zandwijk

Diverclean Sonic

Assignment



Implementing new method to improve cleaning quality while reducing utility costs. The difficulty at this customer was to achieve an ever better cleaning performance with cold water

Project

Country	Poland
Plant	Fish
Production Type	Fish Processing
Area	Open Plant Cleaning
Year	2019-2020/2022
Client Team	Plant manager, Prod. manager
Diversey Team	Artur Kryszczuk, Artur Kryza, Oktawian Duzynski

Description

1. Pre-foaming with this new product is a simple yet revolutionary change in the open plant cleaning procedure that challenges decades of traditional cleaning with pre-clean technology
2. The pre-clean technology relishes heavily soiled areas – tackling protein, fat and tallow soils to significantly reduce the requirement for a long pre-rinsing step.
3. This results are: 1. reduction of time; 2. water and energy reduction; 3. better cleaning performance. These results will also enhance the customers sustainability goals.
4. Diversey's Experts will support the cleaning staff to implement this new technology

Outcome

ETS



32%

Cleaning Time Reduction



**COST
REDUCTION**

Total Savings of

40%

Water Consumption



**OPERATIONAL
EFFICIENCY**

**A better
performance with
cold water**

During production
and cleaning

Diverclean Sonic

Assignment



Implementing Diverclean Sonic method to improve cleaning quality while reducing utility costs. This customer wanted to reduce the time of the Intermediate cleaning (Full cleaning) to increase the production time.

Project

Country	Germany
Plant	Fish
Production Type	Fish Processor
Area	Open Plant Cleaning
Year	2021/2022
Client Team	Night shift manager / Cleaning Staff
Diversey Team	Peter Heller, Lars Chluba

Description

1. Pre-foaming with this new product is a simple yet revolutionary change in the open plant cleaning procedure that challenges decades of traditional cleaning with pre-clean technology
2. The pre-clean technology relishes heavily soiled areas – tackling protein, fat and tallow soils to significantly reduce the requirement for a long pre-rinsing step.
3. This results are: 1. reduction of time; 2. water and energy; 3. better cleaning performance. These results will also enhance the customers sustainability goals.
4. Diversey's Experts will support the cleaning staff to implement this new technology.

Outcome

Diverclean Sonic



20%

Cleaning Time Reduction



**COST
REDUCTION**

Total Savings of

**19% on labor costs
and water and
energy savings**



**OPERATIONAL
EFFICIENCY**

**Reduction cleaning
Time**



Cermaq (salmon slaughterhouse)

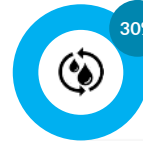
- One of the biggest in Norway, process approx. 270 tons fish per shift (8 hours)
- High focus on sustainability
- 13 cleaners before implementation- reduced to 11 cleaners and removed 4000 hours of overtime

Total annual savings for Cermaq:



Sustainability*

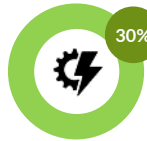
10.414 KG CO₂



30%

Water savings

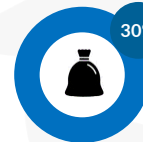
€ 23.100,-
18.432m³



30%

Energy savings

€ 36.539,-
578.542 kWh



30%

Salary savings

€ 568.526,-

*based on information on use of electricity as heating source and Norwegians statistics

