

RECP Best Practice Catalogue

*Use of high pressure cleaners and pressure
guns for water cleansing*

Developed within the framework of MED TEST II



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



The SwitchMed Programme is
funded by the European Union

Best Practice - Use of high pressure cleaners and pressure guns for water cleansing

SECTOR: Food & Beverage

SUBSECTOR: Manufacture of dairy products

PRODUCTS Milk, fermented milk (L'ben), milk curds (Raïb), butter, crème fraiche, Smen

CATEGORY Good Housekeeping

APPLICABILITY Utilities

COMPANY SIZE 158



The SwitchMed Programme is funded by the European Union

Best Practice - Use of high pressure cleaners and pressure guns for water cleansing

Description of the problem (Base scenario):

In the dairy industry, production workshops require frequent cleaning. Currently, there are 9 water taps with pipes that are used for general floor cleaning and external cleaning of equipment. Often the operators let the water run instead of going to the taps to close them, which leads to water losses.

These cleaning operations consume on average 36 m³ of water per day which is not negligible and which increases the volume of waste water to be purified before disposal in the public sewerage network.

Description of the Solution

The improvement measure consists in using two high-pressure cleaners at the two most used water taps to achieve better cleaning efficiency with savings on water.

In addition, it is recommended to equip the spray gun's seven hoses to allow not only a better jet more effective for cleaning, but also to cut the flow of water as soon as the pipes are stopped.



The SwitchMed Programme is funded by the European Union

Best Practice - Use of high pressure cleaners and pressure guns for water cleansing

Economic Benefits

The use of spray guns saves more than 20% on water (on 7 taps) or 1,753 m³/year, or a financial savings of 875 €/year without taking into account the savings associated with the pumping of water from the untreated water reservoir. The use of a high pressure cleaners reduces the volume of water and cleaning time by 50% and also offers the possibility of freeing up workers for other tasks. The water savings of 50% (on the 2 most used taps) corresponds to a savings of 2,504 m³/year, which is a financial savings of 1,250 €/year. The energy consumption by the cleaners is offset by the energy savings from pumping water from the untreated water reservoir. Total savings = 2,125 €/year

Environmental Benefits

Savings of 4,257 m³ water/year
There is a reduction in the amount of waste water treated

Not relevant

Health and safety impact



The SwitchMed Programme is funded by the European Union

Best Practice - Use of high pressure cleaners and pressure guns for water cleansing

Capital investments & financial indicators	Investment: 2 professional pumps + 7 spray guns = 1,400 € Return on Investment: 0.66 year Unaccounted gains: the working time saved for two workers
Suppliers	Local suppliers
Other aspects	No technical barriers
Implementation	The action has been carried out



The SwitchMed Programme is funded by the European Union