

RECP Best Practice Catalogue

*Installing water meters for water monitoring
and controlling*

*Developed within the framework
of MED TEST II*



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



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Best Practice - Installing water meters for water monitoring and controlling

SECTOR:	Food & Beverage
SUBSECTOR:	Manufacture of dairy products
PRODUCTS	UHT milk and pasteurized juices
CATEGORY	Good Housekeeping
APPLICABILITY	Utilities

COMPANY NAME	---
COMPANY SIZE	Medium

Best Practice - Installing water meters for water monitoring and controlling

Description of the problem
(Base scenario):

The company does not have any accurate data for the breakdown of the water consumption among different production processes nor for the water that goes to the product. It was noted that there are many leak points within the water network, and the workers occasionally leave the water taps running.

Due to the poor monitoring system, no one at the company was aware with the magnitude of loss.

Description of the solution

Installing water meters on different locations will allow good monitoring and control of water consumption in the production lines. Good water monitoring will help in identifying the highest section in water consumption and accordingly enable to develop reduction solutions. This will change the mind set of company members as their performance is under control, leading to a more responsible water consumption.

Best Practice - Installing water meters for water monitoring and controlling

Economic Benefits

The installation of water meters will control the daily amount of water used in the production. The anticipated saving from installing water meters is normally 2% from the baseline (5,774 m³/y).

Total annual water saving cost is 1,646 Euro/y.

Environmental Benefits

Amount of water reduced = 5,774 m³/y (2% from the baseline).
Reducing the water consumption shall directly reduce the wastewater generation by the same quantity. Furthermore the energy consumption for pumping the water within the production line will be reduced, and finally the treatment cost at the intake (chemicals and energy cost) will be reduced. Due to the poor information system these savings were not quantified.

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Capital investments & financial indicators

Total capital investment for three water meters is 150 Euros.
Payback period is 1 month

Suppliers

Local suppliers

Other aspects

This measure needs to be implemented during maintenance period.

Implementation

This measure is under implementation by the company as it received some guiding offers and about to buy the water meters.

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Replicability sectors

The same concept can be replicated in:

Any industry that needs water in the production process.

Aspects to investigate for replicability

Check the important locations that need to be monitored.

Useful resources
