



C&G
EVAPORATOR

C&G Evaporator

*a brand of C&G
Depurazione Industriale*

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BUSINESS CASE | VIBRATORY TUMBLING WATER

Sustainability and savings drop by drop

Construction of a complete system
for the recovery of water from
an industrial tumbling process



BUSINESS CASE

Construction of a complete system for the recovery of water from an industrial tumbling process

CUSTOMER

The client is a galvanic company that has an internal tumbling process

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Vibratory tumbling water
Sustainability and savings drop by drop

OBJECTIVES

- Reduce disposal costs
- Reduce the environmental impact of the production process
- Reuse the distillate produced as part of the treatment process

RESULTS



+20% SAVINGS



CIRCULARITY



SUSTAINABILITY



Table of contents

Vibratory tumbling water
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01. **Opportunity** >

02. **Project** >

03. **Solution** >

04. **Analysis of the results** >



01. **Opportunity**

Recover and recirculate good quality industrial water for the tumbling process.



02. **Project**

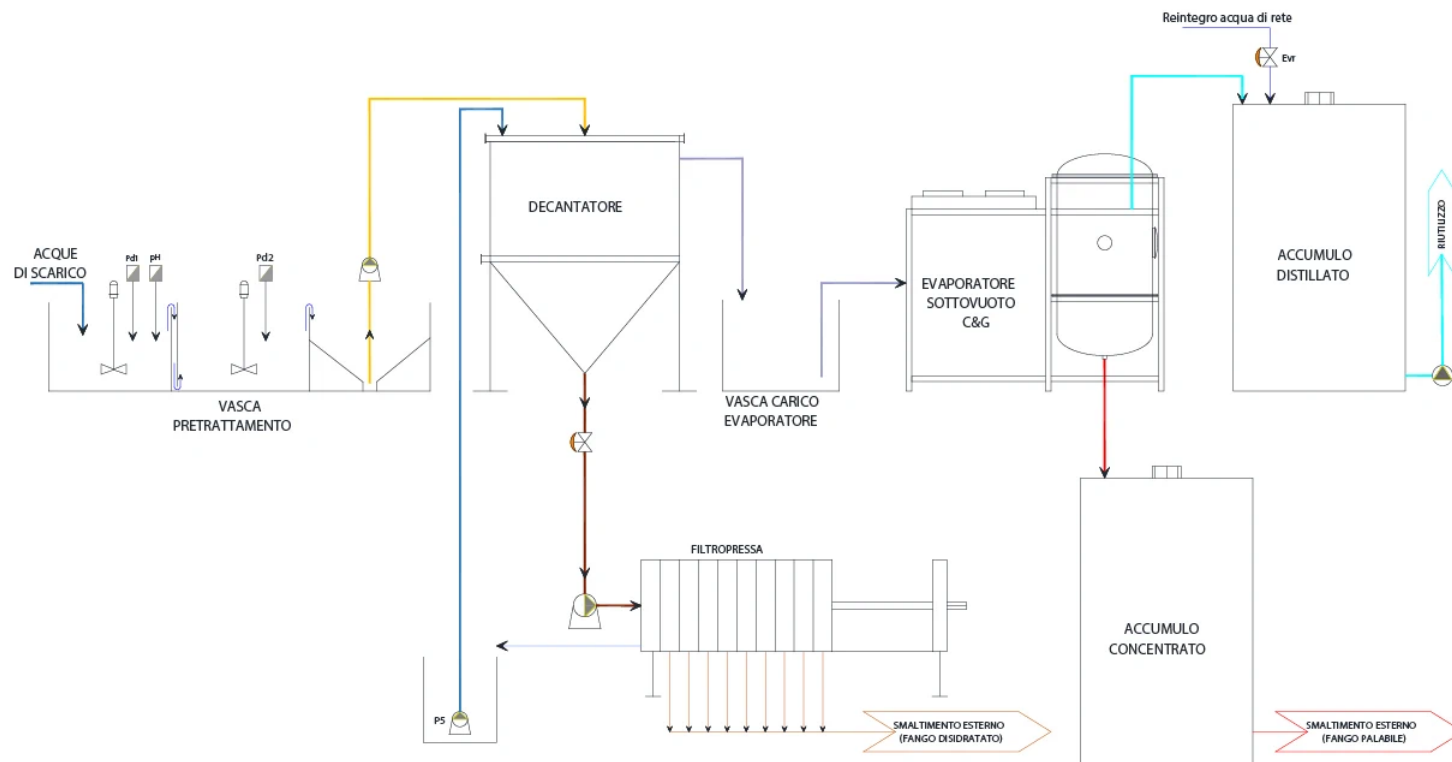
Feasibility study through analysis of disposal costs compared to the costs of recovery and valorization of the water product as a raw/secondary material.



03. **Solution**

Treatment plant consisting of a sludge thickening/filtration process and a vacuum evaporation process for the recovery and reuse of water characterized by good salinity so that it can be reused in the process.

The implementation of the vacuum evaporator treatment plant has demonstrated a clear economic and environmental superiority compared to the traditional solution for the disposal of tumbling water.

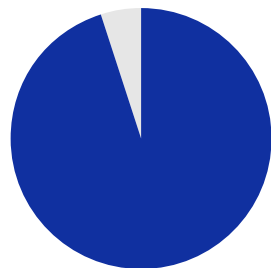


85 €/TON

Total cost of treatment of tumbling water with vacuum evaporator

110 €/TON

Total cost of disposal of tumbling water as is

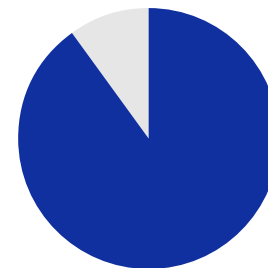


95%

Liquid sent to the vacuum evaporator of the total treated volume.

5%

Filter press sludge of the treated volume.



90%

Distillate produced in the volume sent to the evaporator.

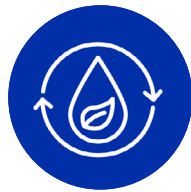
10%

Concentrated product (consisting of soaps and inorganic salts) of the volume sent to the evaporator.

04. Analysis of the results



SAVING



CIRCULARITY



SUSTAINABILITY

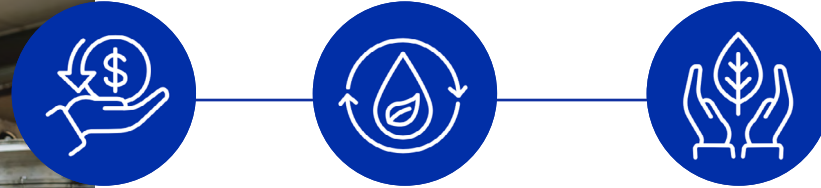
With a treatment cost reduced from €110/ton to €85/ton, the company achieved an **economic saving of 23%**, while simultaneously improving its environmental balance.

This approach not only reduces liquid waste for disposal, but also promotes **more efficient management of water resources**, in line with European directives on the transition to more sustainable economies.

In terms of sustainability, the solution adopted allows the **reuse of the distillate produced** within the production process, contributing to the creation of a **circular model**.

From an operational point of view, the vacuum evaporator has proven to be particularly effective in separating pollutants from water, allowing the recovery of a high-quality distillate that can be used in the production process.

Vibratory tumbling water
Sustainability and savings drop by drop



This solution therefore represents a concrete example of how **technological innovation can reconcile economic and environmental objectives**, while at the same time guaranteeing a competitive advantage on the market.



VACUUM EVAPORATORS

**Start reducing
operating costs
today towards a
more sustainable
future.**

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