

# RECP Best Practices Catalogue

*Ozone-based continuous washing  
machine for denim*

*Developed within the framework of MED TEST II*



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



The SwitchMed Programme is  
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# Best Practice - Ozone-based continuous washing machine for denim

SECTOR:	Textile & Readymade Garments
Branch:	Finishing of textiles
CATEGORY	Technology upgrade/Eco-innovation
APPLICABILITY	Process

COMPANY SIZE	700
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## Description of the Problem (Base Scenario):

The standard washing process has a number of disadvantages such as:

- Significant water consumption
- Significant chemicals consumption
- Significant energy consumption

Which cause a heavy water and air pollution

## Description of the Solution

Washing by Ozone (Ozone Treatment) is a process that consists in completely reducing water consumption when washing jeans, reducing the use of chemical treatments, eliminating the use of permanganate and thus the complete elimination of chemical waste discharged into waste water.

Washing by Ozone does not release any toxic emissions or atmospheric pollutant into the atmosphere, it can reduce the energy and water consumption needed for washing the denim by more than 65% and 90% respectively.



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**Economic Gains**      Economic gain: € 440,000

**Environmental Gains**      Energy Savings: 1,513 MWh  
Water savings: 24,092 m<sup>3</sup>  
Chemicals savings: 10 tons

**Health and Safety Impact**      Productivity enhancement



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<b>Capital Investments &amp; Financial Indicators</b>	€ 565,218 Time for Return on Investment: 1.3 months
<b>Supplier Information</b>	
<b>Other aspects</b>	Productivity enhancement
<b>Implementation</b>	Measure under development



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