

ECUVal SYSTEM, A TREATMENT TO REUSE TEXTILE WASTEWATER AND TO IMPROVE EFFICIENCY OF BIOLOGICAL PLANTS

V.Buscio, M.Vilaseca, V.López-Grimau, C.Gutiérrez-Bouzán

Institute of Textile Research (INTEXTER)-Universitat Politècnica de Catalunya (UPC)-Barcelona Tech
 C/Colom 15, 08222 Terrassa, SPAIN
 info@ecuval.eu - www.ecuval.eu



INTRODUCTION

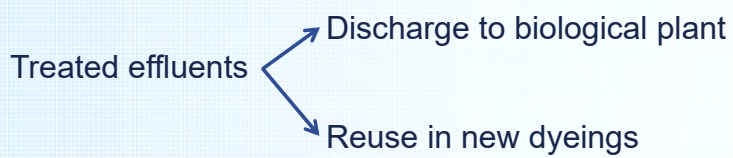
The textile dyeing process produces a large volume of wastewater with high salinity and strong coloration.

Biological processes are efficient in organic matter and turbidity removal, but they show low colour removal efficiency due to the poor biodegradability of dyes. Neither salts are removed in conventional treatments.

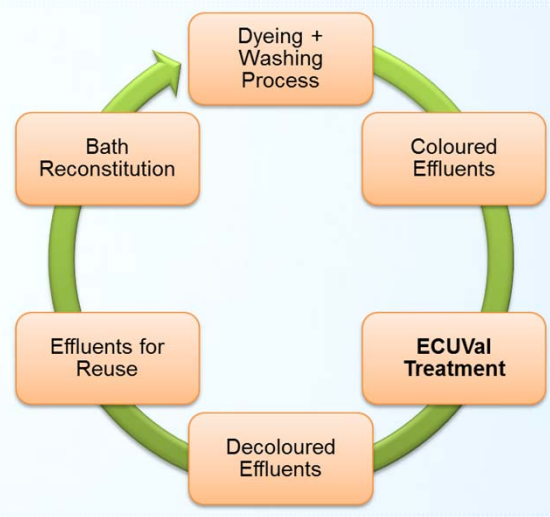


New wastewater system for the treatment and reuse of coloured and saline effluents

Based on an electrochemical technique coupled to UV irradiation. It achieves the degradation of dyes and provides colourless effluents.



- ECUVal is addressed to effluents containing salts and non biodegradable compounds.
- ECUVal is particularly efficient in the treatment and reuse of reactive dyeing and washing effluents.



Environmental and economic benefits

- No chemicals are required to remove colour.
- Saving 70-100% dyeing water.
- Saving 15-60% dyeing electrolyte.
- Lower salinity of wastewater.
- Lower cost of the wastewater discharge.

