

CASE STUDY

RESALT

INNOVATION FOR SUSTAINABILITY IN
THE IGUALADA LEATHER INDUSTRY



Resalt Project Team

Innovative water recycling and regeneration project which has successfully recovered 6.128 t of water since it's beginning

Recycling and regeneration project for the leather industry at Tradebe Igualada

THE PROJECT

This project is an **innovative water recycling** and regeneration initiative aimed at transforming the leather industry in Igualada. Led by **Tradebe Igualada** in collaboration with IDR and associated tanners, the project seeks to **reduce water consumption and salt** usage in the leather production process. By implementing advanced filtration technologies, RESALT promotes **sustainability and circular economy** principles within the industry.

THE SOLUTION

To address **high water consumption** and salt usage in the Igualada leather industry, the RESALT project launched in 2020 as a pilot for water regeneration. By 2024, it introduced **ultrafiltration** for reuse in less demanding processes and nanofiltration to enhance water quality. In 2025, a tertiary treatment (DAF) system will further improve efficiency. These advancements **enable significant water and salt recovery**, reducing environmental impact and promoting sustainability in the industry.

THE CHALLENGE

The **leather industry** in Igualada relies heavily on water, making it crucial to reduce consumption due to increasing environmental and climatic concerns. Additionally, the industry uses **large amounts of salt** for preserving hides, which leads to significant waste management challenges and environmental impact. The challenge was to develop a system that could both **reduce water consumption** and limit the use of mineral salt while maintaining the efficiency of production processes.

BENEFITS

- 1. Water conservation:** since the project's inception, 6,128 tonnes of water have been recovered, with 5,987 tonnes reused internally and 141 tonnes returned to tanners.
- 2. Reduced salt consumption:** the project promotes the use of regenerated saltwater, lowering reliance on mineral salts and minimizing waste.
- 3. Environmental sustainability:** by closing the water cycle, RESALT mitigates drought effects and contributes to resource efficiency.