

PROJECT OBJECTIVES

- ◆ Demonstration of use of innovative formulations free from toxic products deriving from leather tanning.
- ◆ Substitution of chlorinated with eco-sustainable natural products in the defatting process.
- ◆ Optimization and application of new tanning formulations specific to defatting phase, containing products derived from natural raw materials such as glucosides, biomasses, husk, vegetable oils, highly absorbed by leather.
- ◆ Study and application of intelligent and ecological products: leather treated with formulations allowing controlled release of natural biological active principles or perfumes.



INESCOP
CENTER FOR TECHNOLOGY
AND INNOVATION

NEWPORT srl



Project Coordinator:
Prof. Roberto Bianchini
Chemical Department "Ugo Schiff"
Florence University
roberto.bianchini@unifi.it



LIFE+ ECODEFATTING

LIFE13 ENV/T/000470

ecodefating

**"Environmentally-
friendly natural
products instead of
chemical Products in
the degreasing
phase of the tanning**

WWW.LIFE-ECODEFATTING.COM

PROJECT ACTIONS

The ECODEFATTING solution will be demonstrated at:

1. Laboratory level (UNIFI and ICCOMCNR)
2. Semi-industrial level (Newport and INESCOP)
3. Pre-industrial (at least two tanneries, in Spain and Italy)

Dissemination days and technical/ financial demonstrations will be hosted by participating tanneries. The project also considers different training actions aimed at Spanish and Italian tanners.

EXPECTED RESULTS

- ◆ 100% substitution of raw materials of petrochemical origin with others based on renewable sources.
- ◆ 100% elimination of chlorinated molecules from the defatting process.
- ◆ 100% elimination of the chlorinated functional group.
- ◆ 100% increase in the biodegradability profiles of the molecules used.
- ◆ 50% increase in the penetration of defatting products into derma.
- ◆ Defatting exhaustion, i.e. product consumption reduced by 30%
- ◆ 20% reduction of pollutants in bath wastewaters.
- ◆ 20% reduction of water consumption during the tanning process.
- ◆ 20% reduction of polluting load in tannery waste water.
- ◆ 100% reduction high chlorine toxicity in the tanning cycle.
- ◆ Reduction of tannage waste and 33% reduction of the waste management.
- ◆ 20% reduction of Energy consumption.