

A stylized tree graphic with a green trunk and branches. The canopy is composed of various colored circles (green, orange, light green) containing icons: a lightbulb, a leaf, a sun, a car, a recycling symbol, a battery with a leaf, a snowflake, a recycling symbol, a leaf, a lightbulb, a recycling symbol, and a leaf. The text is centered over the tree.

NEW LIMING PROCESS IN LEATHER TANNING FOR IMPROVING THE FINAL PRODUCT QUALITY, REDUCING THE ENVIRONMENTAL ASSOCIATED IMPACT AND THE RISK OF TOXICITY IN THE MANUFACTURING STAGE

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THE ORGANIZATION: CURTIDOS BADIA, S.A.



History

- Was founded in 1889 as a medium family enterprise.
- Specialized in the **tanning of premium quality bovine hides and skins** for leather goods fashion industries.
- 90% of exports go to European countries.
- The company is **located in the town of Igualada**, a city with a great tradition in tanning.

THE ORGANIZATION: CURTIDOS BADIA, S.A.



The organization philosophy

- **Boost the local wealth:** The company uses Spanish raw materials.
- **Costumer priority:** Its philosophy is based on customer care and quality.
- **Exclusiveness:** Many leather hides are made to measure for specific color, quality and design.

THE ORGANIZATION: CURTIDOS BADIA, S.A.



Innovative nature

- Always studying and analyzing new opportunities, **leather qualities** and **sustainability**.
- International expansion plan.

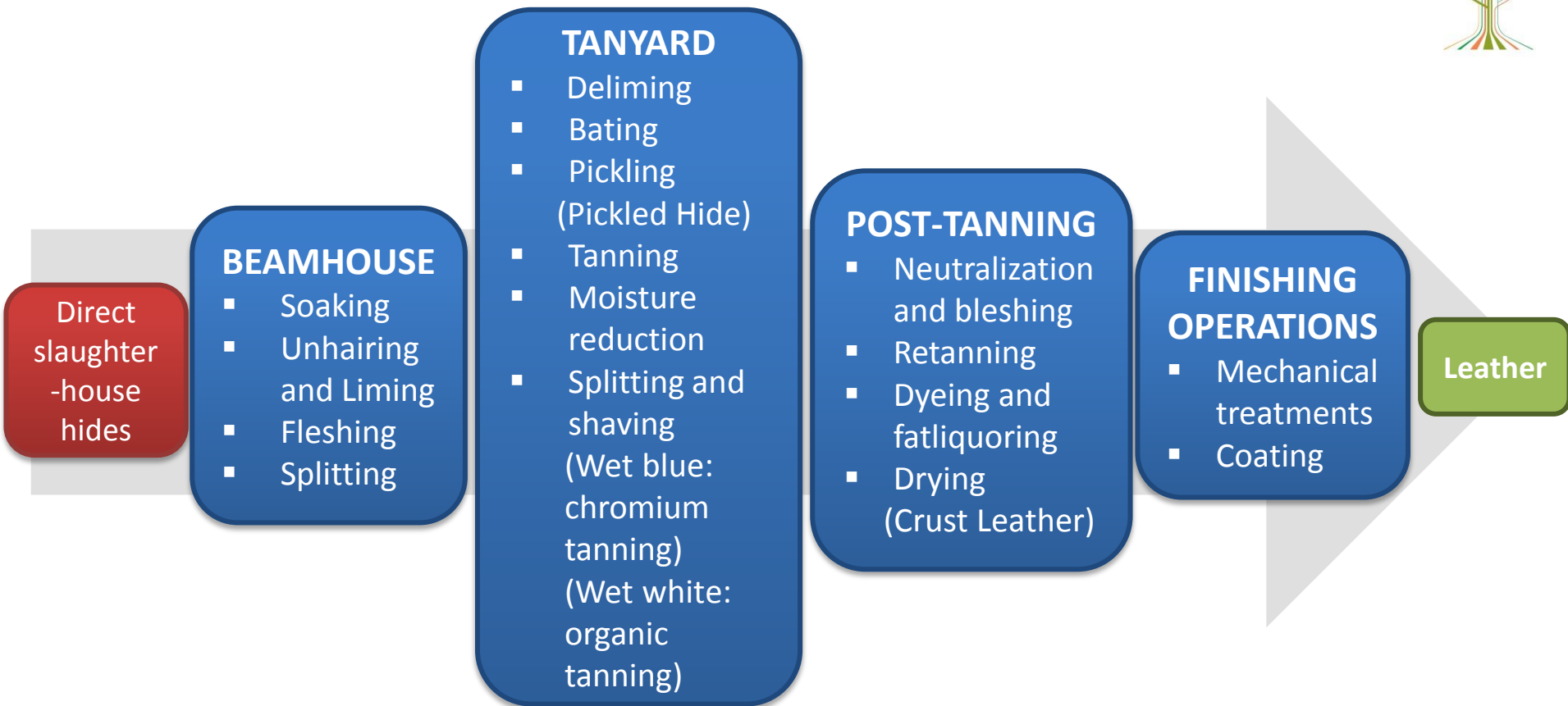


THE PROJECT CONTENT



- The project is focused on the development of an **innovative method of liming and tanning** with hair recovery.
- The method is based on the **use of H₂O₂ and enzymes** for the oxidative step.
- The project involves the application of new control and process technologies to minimize the emissions that occur in this process step.

LEATHER MANUFACTURING



Scheme of multistep leather processing steps and denomination (in brackets) of leather at different stage of processing

OBJECTIVES



1st objective: **Implement a more sustainable process.**

- **Satisfy** the increasing **environmental awareness** of citizens.
- **Respect** the environmental European **regulations**.
- Increase healthier and secure working conditions for employees.
- **Eliminate** the current use of **sulfide** in the production process.
- Couple and up-scale of existing environmental friendly leather processes.

OBJECTIVES



2nd objective: **Gain environmental sustainability over other countries.**

- Demonstrate the sustainability of cutting edge technologies is necessary prior to market penetration.
- Add value to the process.

OBJECTIVES



3rd objective: **Boost the tanning industry in the town of Igualada.**

- Keep and even **increase the number of employees.**
- Establish the city of Igualada as a global benchmark of tanning, **Igualada European Capital of quality leather.**

OBJECTIVES



4th objective: **Achieve sustainable items.**

- Improve the environmental footprint by **minimizing solid and liquid waste, reclamation and reuse.**
- **Decrease of pollutants in wastewater** (sulphides, chemical oxygen demand (COD), biochemical oxygen demand (BOD), nitrogen and chrome).
- Optimize the exhaustion of reagents.
- Increase the performance of the bovine, which has a diminishing trend.