







Leder Chimica

**DSS Beamhouse Process** 

Via Della Concia 69/71 36071 Arzignano - VI Italy

LEDER CHIMICA

www.lederchimica.com info@lederc.it

the top priority.

LEDER CHIMICA

**OUR PHILOSOPHY** 

Leder Chimica's strength is based on the flexibility towards the customer, always improving quality and service. Part of the team is a group of young, skilled and motivated individuals aiming to keep up with the latest trends as well as online/onsite Technical consulting, innovative products, and accuracy on meeting deadlines and project milestones.

Our continuous improvement and our expertise combined together with the latest R&D technologies and Quality Control Systems, allows to research every kind of chemicals without a third-party involvement, delivering faster than most of our competitors.

Substantial investments of innovative production technologies and logistics systems, allows to fulfill urgent customer demands in a time as little as a few hours, following HSE regulations.

(ISO 9001:2015 certified)

Leder Chimica's main market share is located abroad: China, South Korea, Pakistan, Poland, Portugal, South America and India. Our portfolio and range of products is quite extended, allowing to be present in the major industries that require Leather as the premium product such as shoe upper, garments, automotive, upholstery and leather goods.

"Chemistry between you and leather"

This is Leder Chimica



Leder Chimica DSS Beamhouse Process lederchimica.com

.02

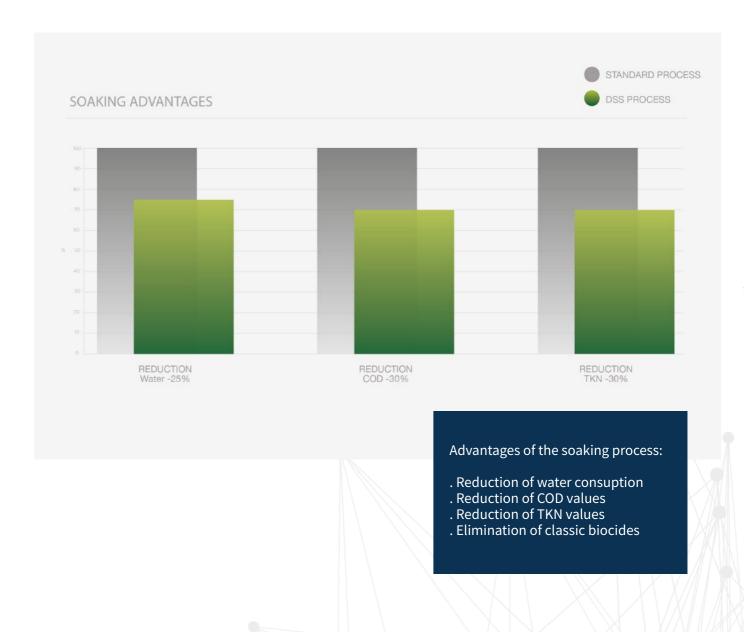
# THE BEAMHOUSE PROCESS

The raw material as hides and skins, to maintain their inbuild natural characteristics, must go through a thorough preparation prior the Tanning process. A standard Beamhouse routine can be broken down as following: Soaking, Liming, Un-hairing, Fleshing and Splitting. All these steps are a crucial preparation in restoring the moisture content within the collagen fiber structure, and to eliminate impurities such as dung, grease and hair.

### Why do we use Leder Chimica technology?

The standard Beamhouse processes are the main contributors of the overall pollution of the Leather industry. Leder Chimica has decided to take the matter in their own hands, by developing an innovative Beamhouse process aimed to significantly reduce the impact on the environment: a user friendly, simple and "Green" system, without jeopardizing the quality of the final material.

### **SOAKING**



Leder Chimica DSS Beamhouse Process lederchimica.com

## **DSS UNHAIRING**

.03

DSS Product Architecture is an innovative and sustainable technology developed to improve the standard Liming process in terms of reduction/ elimination of highly polluting substances while maintaining a very high quality of the leather, keeping in mind production KPI's by completing the whole process 24 hours.

Several scale up trials, in a production environment, have proven the efficiency and versatility of its application, not only on specific breeds of raw material but also with different preservation methods. The aim of our DSS technology is to provide a better performance in the opening up and relaxation of the inner fiber structure, including an excellent hair removal as well as a complete cleaned grain from the natural pigment of the raw material, giving the flexibility of its utilization for premium end-uses like Nubuck, Anilines and Semi-Anilines, also when a Hair-saving processes in needed.

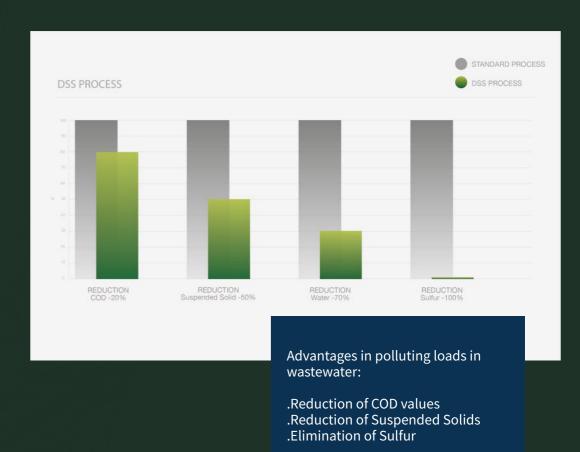
From the sustainability perspective, the DSS product architecture, prevents the usage of Sulfide and hydrosulfide derivatives products during the unhairing process, lowering your internal PPM targets of the wastewater, and a much safer work environment free from unpleasant smells and dangerous volatile gases H<sub>2</sub>S during de-liming and Pickling. Our studies suggest that the waste baths of our process have a high protein content, free from harmful and toxic substances and can therefore be exploited in other sectors without necessarily destined to the waste water treatment plant.

### OTHER ADVANTAGES

- . SUSTAINABLE/ENVIRONMENTALLY FRIENDLY PRODUCTS
- . DECREASE OF SMELL FROM THE NATURAL FAT
- . REDUCTION OF TKN VALUES
- . REDUCTION OF COD VALUES
- . REDUCTION OF SUSPENDED SOLIDS
- . COMPLETE HAIR REMOVAL
- . ELIMINATION OF LIME

### Environmental Impact Standard VS DSS Technology

| CHEMICAL PRODUCT   | STANDARD PROCESS | DSS PROCESS |
|--------------------|------------------|-------------|
| Amines             | 1.0 - 1.5 %      | 0%          |
| Mercaptans         | 1.0 - 1.5 %      | 0%          |
| Sodium Sulfide     | 1.5 - 2.5 %      | 0%          |
| Sodium Sulfhydrate | 0.5 - 1.3 %      | 0%          |
| Lime               | 3 - 4 %          | 0%          |



Thanks to the continuous innovation of our technical staff, beamhouse processes with a total duration of 24 hours is also possible, offering significant production advantages for the tanner.

### IT IS POSSIBLE TO IMPLEMENT OUR PROCESS WITH A STANDARD PROCESS

For example, if you want to eliminate the bulb and the mantle in a process with hair saving, thus increasing the quality of the hides intended for high-end items.

# DSS OUTCOME

As demonstrate in the pictures, independently from the raw material, with our DSS system, the outcome is consistent: a clean hide, without any residual of the natural pigment and versatile for any type of end use.





# CHEMISTRY BETWEEN YOU AND LEATHER

