


LEATHER FOR EARTH

Information Summary

LEATHER
40075
Leather for earth



40075 is the measure
of the Earth's circumference in Km.
That's where we started to create this natural
leather with features never seen before.

Leather 40075 represents the unstoppable pursuit of
excellence, our passion for preserving the essence of leather
and, the commitment to protect our planet by continuing to
do what we like best.

Leather with superior characteristics, with a natural tanning
process, completely certified in all its phases: from the
supply of raw materials to the finished product.

Leather 40075 is the evolution of vegetable tanning
both in environmental terms and in terms
of versatility and performances.

The leather is by definition a sustainable product.

A production started by mankind: a tanning
process from vegetal extracts

A unique working process combining tradition,
innovation and sustainability

With the warranty of an
Accredited Registered Body

LEATHER
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Incas reality

The **Leather 40075** process is the result of a unique working reality which, technologically up-to-date, relies its development on the respect for man and the environment.

INCAS

The first tanning company in Europe having received the EMAS Registration. The first tannery in Italy having obtained ICEC Certification of Companies' Sustainability in 2014. In accordance with the UNIC Code of Conduct and Social Accountability since 2012.

Leather 40075 is the result of several studies carried out by Incas, whose outcome was achieved through a process called Hi Co. This process certifies to produce metal-free natural skins, conforming to the strictest global legislations for the protection of the environment. First working process certified by ICEC in Italy since 2007!







Our policy

PRAGMATISM, INNOVATIVE TRADITION, RECYCLING, ECO-FRIENDLY APPROACH

Although the market is becoming more and more tough, competitive and even irrational, Incas's goal is to express its own "identity", strong, clearly identifiable, a reference model outside (stakeholders) and inside (workers, etc.)

Expertise and competence along with research and innovation are the bases of this approach towards work. All those who work within and for INCAS are encouraged to share such attitude with the management and to collaborate in order to:

- Implement and keep updated an adequate risk-management as well as the opportunities affecting the conformity of the products and the processes according to the development of the business environment
- Insure an accurate management and monitoring of each step of the process, so that the final good has the high-quality standards established by the Tannery, as well as the characteristics expected by the client and the relevant compelling requirements
- Insure the punctual compliance with the agreed delivery times and with the declared product performances
- Understand the final customer's needs, working with the finest adaptability in order to fulfil personalized and specific demands
- Insure transparency and clarity within the communication both with the clients and the rest of the community, including authorities, especially concerning the environmental aspects linked to the activities, the products and the services of the Tannery, through an Environmental Statement updated every year
- Comply with values such as transparency, loyalty and good faith while doing business with institutions, clients, suppliers and competitors, avoiding dishonest actions that would violate the approved Code of Conduct and Social Responsibility
- Insure the full compliance with the compelling requirements, laws and regulations, likely to be implemented in accordance with the environment, society and workers' health and safety, including the National Collective Labour Agreement of the tanning sector
- Assess the environmental and quality aspects linked to each new activity, product or process of the Tannery
- Regularly update the operating procedures of the Integrated Management System, paying much attention to emergency procedures.

LEATHER 40075 products

LEATHER 40075 is a full-cycle working process through an **organic metal-free tanning***.

The following leather goods are produced through the LEATHER40075 process:

veals

baby calves

buffaloes

From the product lines **AQUA, TERRA** and **AER**

Targeting the production of:

footwear

leather goods

garments

These articles will be used to realize high-quality leather goods admired by the most important brands all over the world.

** EN 15987 "Leather-Terminology-Key definitions for the leather trade"*



Peculiar characteristics of the process

A structured manufacturing process followed step by step

Soaking and liming operations with recycling of sulfide

Organic metal-free tannery: EN 15987 “Leather-Terminology-Key definitions for the leather trade”

Selection after tanning

Environmental aspects of the process:

- 53.7% of water is saved during the liming operations
- As well as 32.5% of sodium sulfide
- The leathers are manufactured in plants complying with both ISO 14001 standards and EMAS Registration
- The process abides by the calculus of the product Environmental Footprint in accordance with the Leather PEFCR rules, established by the European Commission in occasion of the Single Market for Green Products Initiative

A mark of origin on the final product:

The leathers are entirely produced in Italy and, therefore, marked as “Made in Italy” in accordance with UNI EN 16484 standards

Block diagram of the manufacturing cycle

LEATHER40075 manufacturing process includes all the steps of the tanning cycle from its very beginning, from the raw skins to the final leather, including all its subcategories. As a result, this process turns out to be methodical and complex: it requires not only a high number of controls but also a specially-trained staff.

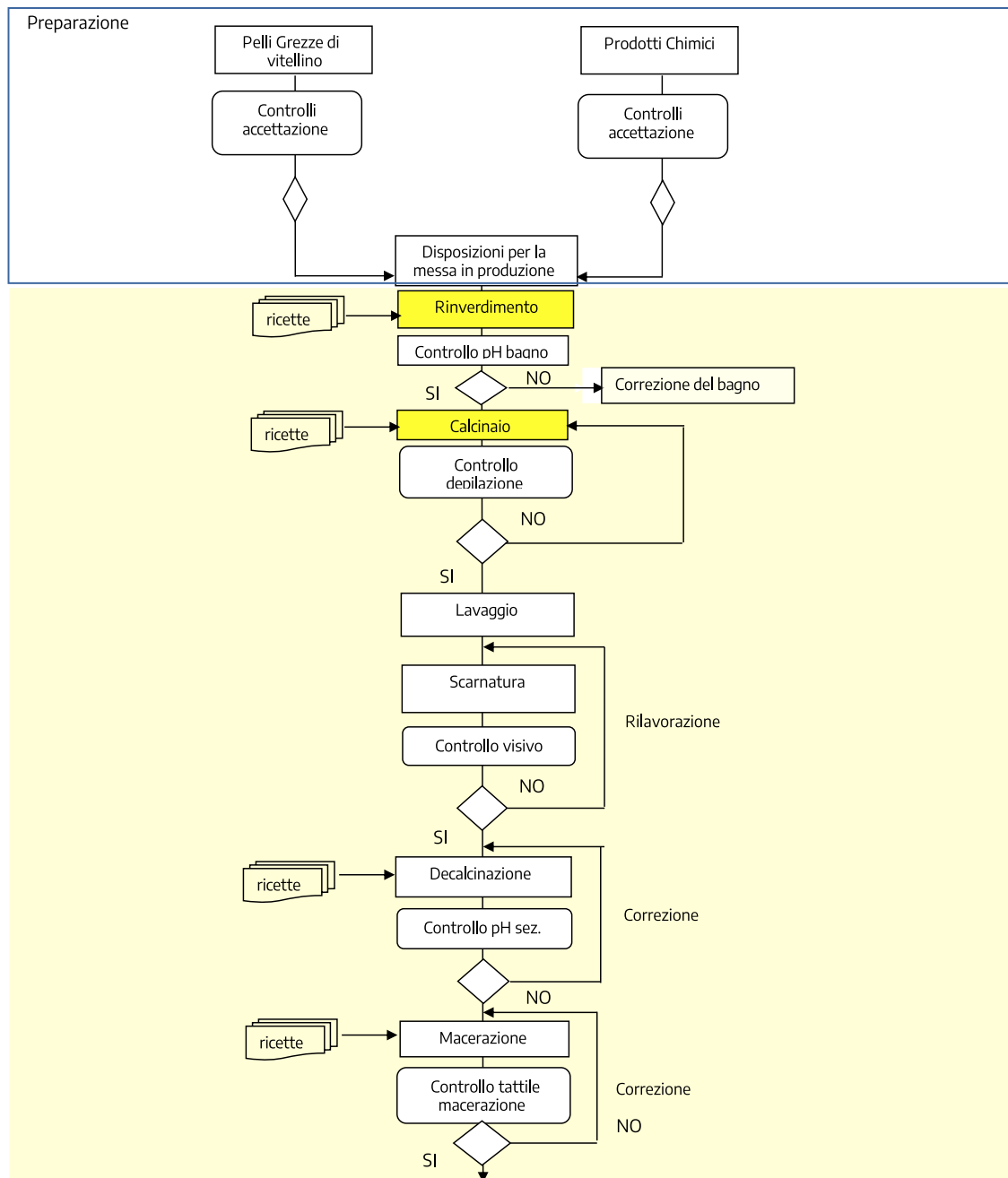
Caption of the symbols in the flow-chart

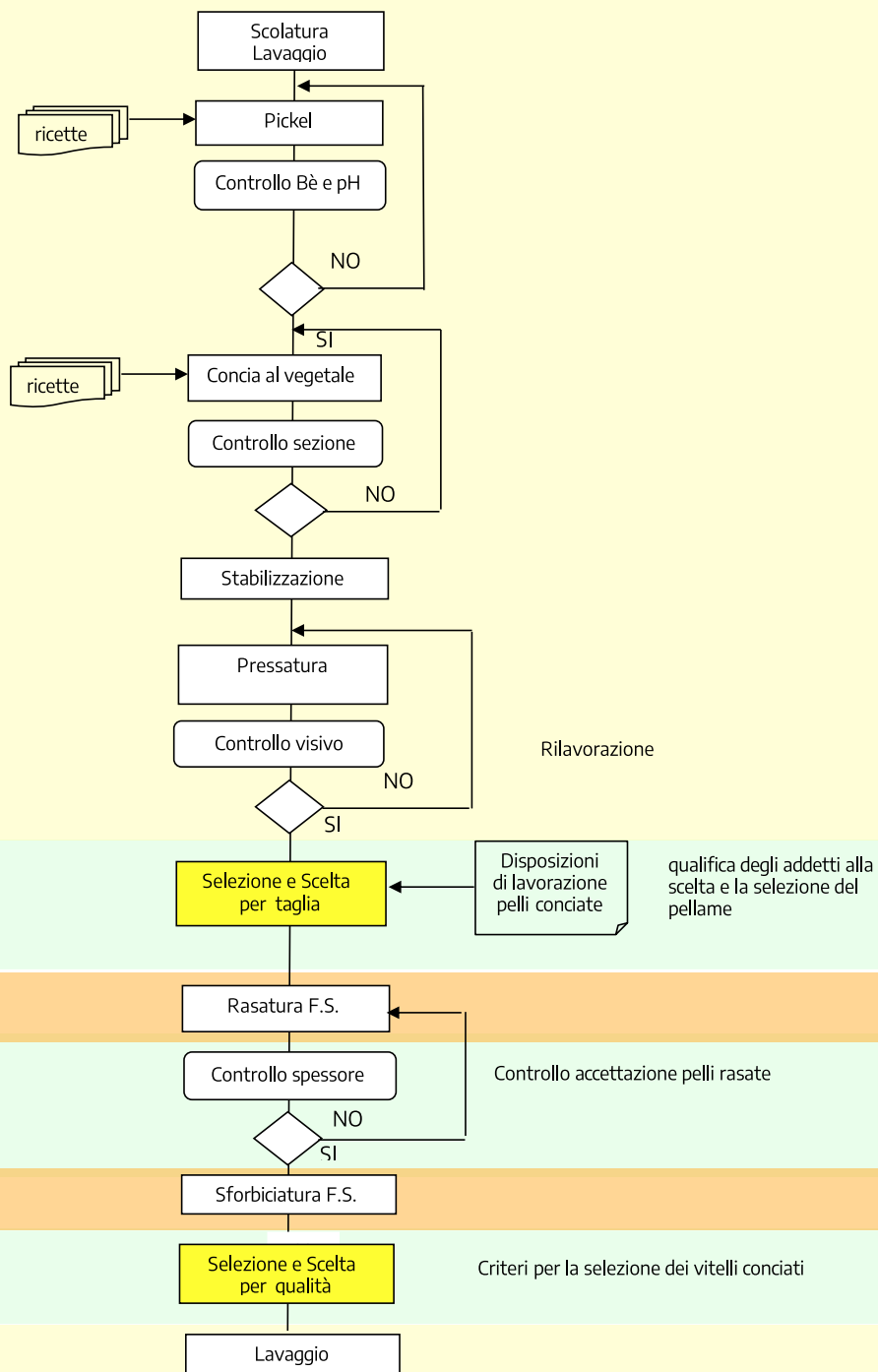
The background colors of the different activities illustrated in the flow-chart indicate in which departments the steps are carried out.

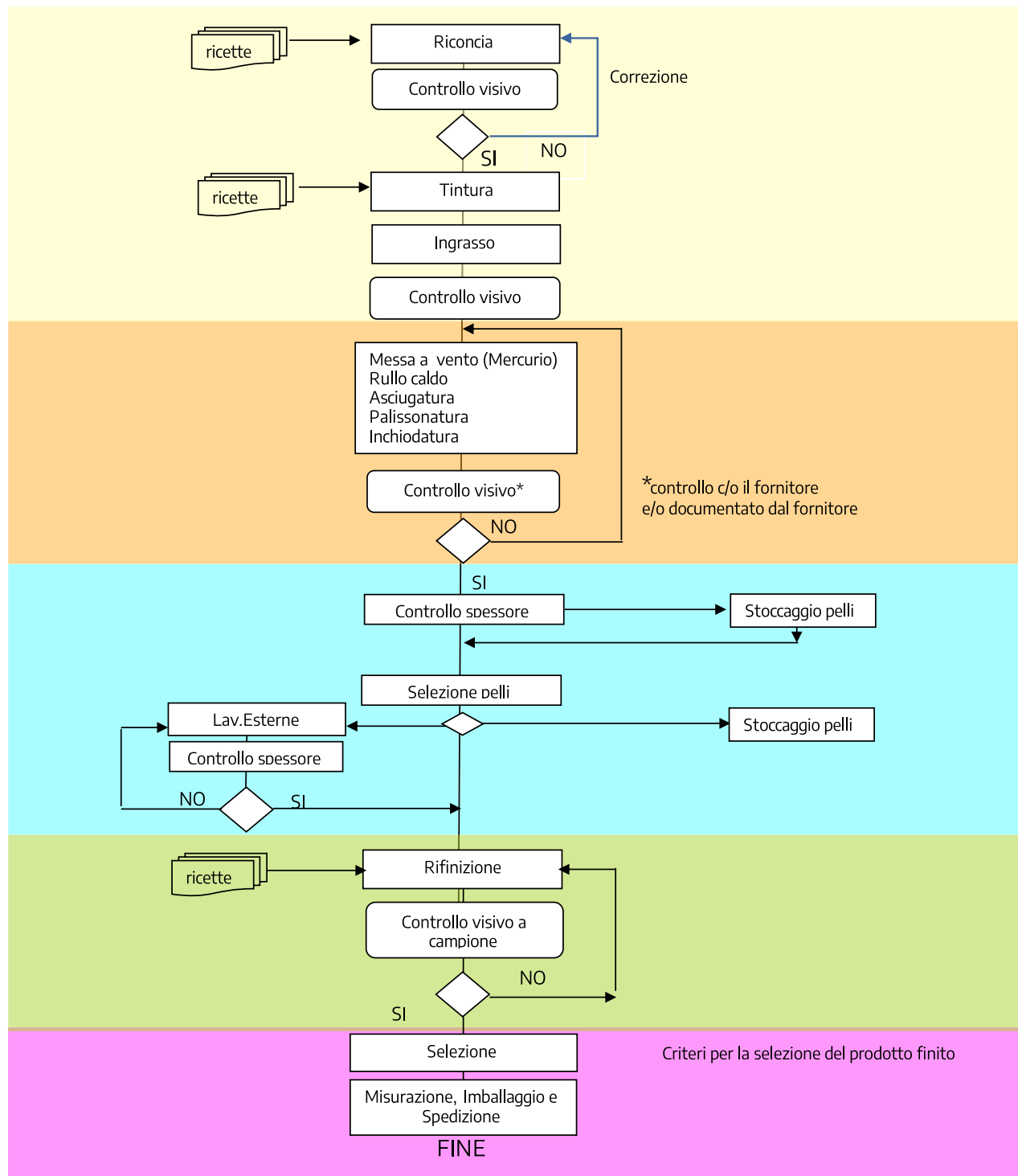


The yellow cases represent the steps peculiar to the **LEATHER 40075** process

LEATHER 40075 process







Soaking and liming operations

Thanks to soaking is necessary the leather comes back to its natural conditions. This operation is performed following the working guidelines displayed in the soaking procedures. After the “addition” and “rotation” in the soaking, a pH control over the bath is performed to make sure that it stays within the guidelines’ measures. Liming aims at dehairing the skins. This step, like the previous one, is carried out in accordance with the soaking guidelines. This specific operation does explain one of the distinctive characteristics differentiating the LEATHER40075 process and its output from any other vegetal tanning process.

Tanning

This step follows specific tanning guidelines. Its outcome is defined by a visual check done over a portion of leather. The leathers are finally let resting for at least four days in one specific warehouse.

Retanning, dyeing and fat liquoring

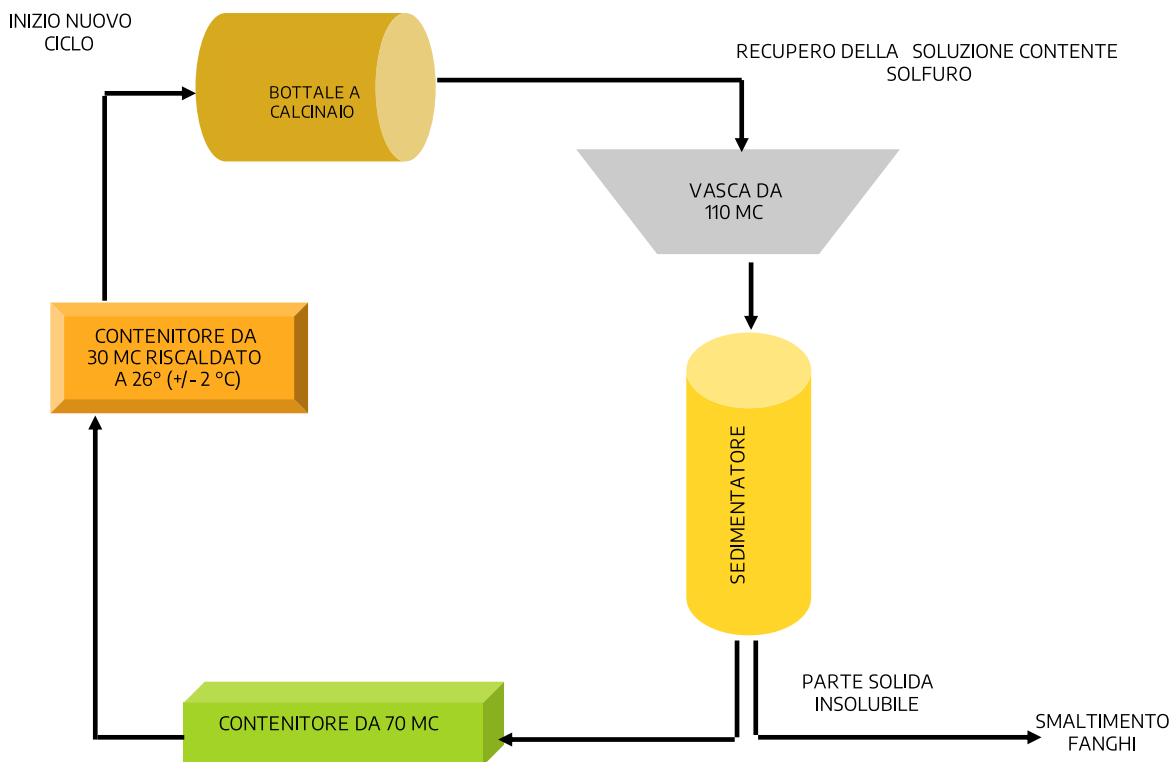
Retanning consists of lending the skin softness, fullness and tightness. Each article is characterized by its proper procedures of retanning, dyeing and fat liquoring. Depending on the client’s demands, the leather is dyed in rotating drums following the procedures necessary to create the color. Fat liquoring lends the leathers the right softness, by employing oils which bind to the fibers more or less strongly. After these three steps (retanning, dyeing and fat liquoring) the department manager carries out the controls required by the internal procedures. He, then, gives the go-ahead for the next steps.

Finishing

Finishing creates particular features on the leather, following specific procedures. During this step the color is controlled through a visual inspection. It is, besides, compared with either the color standards defined in the swatch book or the client’s samples. In order to do that, a specific light room is used, which allows to carry out the controls under the best conditions ever.

The recycling of the sulfide in drums operation

The drums process includes soaking and liming. This step is highly important in order to limit the impact of the process on the environment. Liming's goal is leather depilation. It's this exact operation that explains the peculiarity of LEATHER40075. The image below shows the operations peculiar to the process during liming.



After each drums process the solution - containing residual sulfide - is taken from the rotating drums and introduced into a 110M3-wide pit. It, then, goes into a settling drum of 100M3 in order to remove the solid insoluble parts (undissolved lime, sand, ground remainings etc.) disposed of as mud. Through the

so-called “too full” mechanism, the liquid solution subsequently goes into another pit of 70M³. It then goes into another one of 30M³, where a steam-fueled heating system brings the temperature up to $26 \pm 2^{\circ}\text{C}$. Finally, the solution is directly reintroduced into the rotating drums in order to undergo the soaking and liming operations, following the quantities listed in the appropriate procedures. The total content of sodium sulfide needed to de-hair the leathers is reached by introducing 12.5% sodium sulfide liquid solution into the rotating drums. The waste sodium sulfide solution reintroduced into the liming cycle is highly rich in amines, which enable to obtain a straighter and fuller leather. The recycling of the sulfide solution improves the environmental impact caused by liming and soaking, along with a decrease in COD levels, in suspended sediments and in all the other standards that are to be controlled at the end of the producing cycle. In order to keep under control this step of the process, Incas periodically monitors the standards of the solution in the liming bath. The results from the internal analytical laboratory highlight a content of sodium sulfide fluctuating between 7g/l and 17 g/l. these levels are examined by the production manager, classified and registered in the folder labeled “liming”. The results of the analyses realized on the solution by a certified external laboratory highlight a total content of nitrogen fluctuating between 6500 mg/l and 9000 mg/l. By ensuring that the amount of amines in the baths stays between the values, a better result of fullness and roundness is guaranteed. The ammoniacal nitrogen is kept under control through monthly examinations. The reports of the analyses made by the laboratory which carries out the examinations are kept by RGA at the analytical laboratory. The best standards for sodium sulfide are between 7g/l and 17 g/l whilst those for total nitrogen between 6.5 g/l and 9.0. “Protein/nitrogen” stands for the amount of amines in the recycled bath. Its values are given by the subtraction of ammoniacal nitrogen to total nitrogen. Since according to the procedure calcium hydroxide is to be added into the bath, calcium ion values are monthly controlled. It has been observed that its range is between 3.000 and 5.000 mg/l. After liming the department supervisor or other assistants carry out visual and tactile inspections onto the leather to assess its depilation conditions and register the outcome. All the results coming from analytical examinations are registered, stored and made available to third parties, if requested.

Organic metal-free tanning

All the steps of the drums and the finishing operations are performed with such products and proceeding as to ensure the compliance with the leather definition of “metal free”: tanning is carried out through natural or synthetic tanning agents, containing in total no more than 0.1% of tanning metals (Cr, Al, Ti, Zr, Fe), in accordance with the European standard EN 15987 “Leather- terminology-Key definitions for the leather trade”. The working process is developed in order to ensure further safety requirements from a chemical perspective; in particular:

- fairly reduces content of formaldehyde
- content of extractable heavy metals in accordance with toys safety regulations



Chemical characteristics

The characteristics of the leathers undergoing **LEATHER 40075** process fully abide by the restricted substances regulation standards, as shown below, and their **performances often turn out to be far better than the legislation standards themselves.**

Caratteristica	Metodo di prova	Requisito richiesto dalla norma	Valori Riscontrati su Leather40075
Contenuto di metalli (Cr, Al, Ti, Zr, Fe)	UNI EN ISO 17072-2	≤ 0,1% come somma dei metalli concianti su peso secco della pelle (metal free)	0,0320% = 320 ppm
Ammine aromatiche	UNI EN ISO 17234-1 UNI EN ISO 17234-2	≤ 30 mg/kg	≤ 30 mg/kg
Pentaclorofenolo	UNI EN ISO 17070	≤ 1 mg/kg	≤ 1 mg/kg
Tetraclorofenolo	UNI EN ISO 17070	≤ 1 mg/kg	≤ 1 mg/kg
Cromo esavalente	UNI EN ISO 17075	≤ 3 mg/kg	≤ 3 mg/kg
Formaldeide	UNI EN ISO 17226-1	≤ 16 mg/kg	≤ 16 mg/kg
pH Indice differenziale (ΔpH)	UNI EN ISO 4045	pH ≥ 3,2 ΔpH ≤ 0,7	pH ≥ 3,2 ΔpH ≤ 0,7
Metalli pesanti estraibili (As, Cd, Cr III, Co, Pb, Hg, Sb, Ba, Se)	UNI EN 71-3 (sicurezza dei giocattoli, migrazione di alcuni elementi)	As ≤ 47 mg/kg Cd ≤ 17 mg/kg Cr III ≤ 460 mg/kg Co ≤ 130 mg/kg Pb ≤ 160 mg/kg Hg ≤ 94 mg/kg Sb ≤ 60 mg/kg Ba ≤ 18750 mg/kg Se ≤ 460 mg/kg	< L.Q.
Metalli pesanti estraibili con sudore artificiale (Cd, Co, Ni, Pb)	UNI EN ISO 17072-1	Cd ≤ 1 mg/kg Co ≤ 4 mg/kg Ni ≤ 4 mg/kg Pb ≤ 3 mg/kg	< L.Q.

Environmental characteristics of the process

The working procedure for drums studied for liming and recycling of sulfide allows to save both in terms of water and of “fresh” sodium sulfide. More exactly:

- 53.7% of water is saved during liming
- 32.5% of sodium sulfide is saved as well

The working process respects the environment since controls are ensured by both EMAS Registration and ISO14100 certification (cf. EMAS Certification and ISO14100 issued by ICEC).



**100%
MADE IN ITALY**
Certificazione ICEC
L'unica conceria in Italia ad aver
ottenuto questa certificazione.



EN 15987
Il processo di lavorazione
completo con concia organica
metal-free



LWG
BRONZE RATED
Audited Against LWG Standards



ISO 14001
Certificazione ICEC - Environmental
Management System ISO 14001



ISO 9001
Certificazione ICEC - Quality
Management System ISO 9001



ICEC
Certificate ICEC
"CERT-001-2014-SUSTAINABILITY"



**GESTIONE AMBIENTALE
VERIFICA**
Reg. n. IT-000648



UNIC
Social Accountability



**SUSTAINABILITY
CERTIFICATION**
ICEC



**ENERGIA RINNOVABILE
CERTIFICATA**
Il 100% dell'energia elettrica
utilizzata nelle fasi produttive
proviene da fonti rinnovabili



A photograph of a tannery workshop. In the foreground, there are large, wavy stacks of red and brown leather. A small Italian flag on a silver stand is placed on the red leather. The background shows a dimly lit workshop with more leather and industrial equipment.

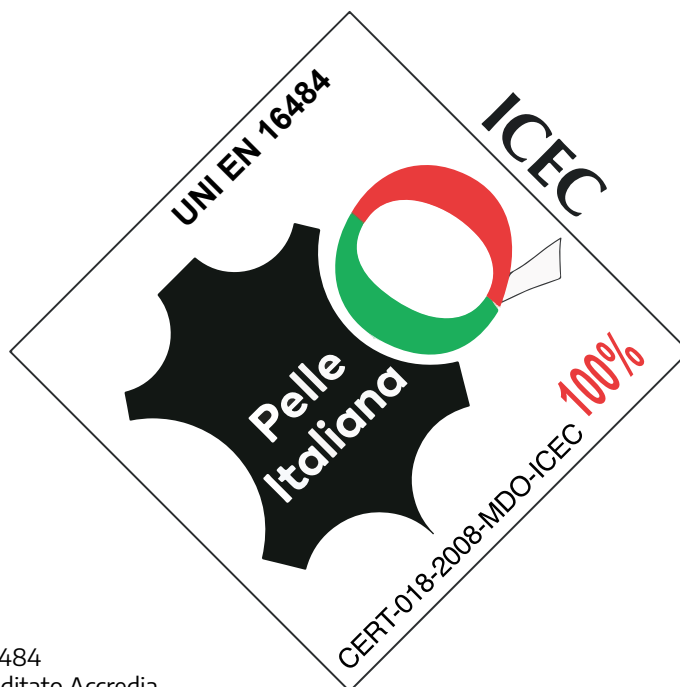
INCAS is, for time being, the only tannery to have reached the certification **100% MADE IN ITALY**

Thanks to the Environmental Statement, drafted in accordance with EMAS Regulations and available to all the interested parties on the website www.iniziativeconciarieassociate.it, our company sets the goal of continuously environmentally improving itself, while periodically undergoing ICEC examinations. Incas manufacturing processes are subject to the product Environmental Footprint, in accordance with the Leather PEFCR rules, established by the European Commission in occasion of the Single Market for Green Products Initiative. Besides, our company pays particular attention to the exploitation of resources, as it is shown by the following aspects:

- When providing vegetal tannins, tannins coming from FSC-certified woods are preferred (the Forest Stewardship Council acts for a right forest management)
- 100% of the employed electricity comes from renewable sources

A mark of origin on the final leathers

The working processes are performed in Italy so to receive the mark of origin certification **“Made in Italy 100%”**, in accordance with EN16484 standard.



Certificato MADE IN ITALY
in base alla Norma UNI EN 16484
CERT-018-2008-MDO– Accreditato Accredia

INIZIATIVE
CONCIARIE
ASSOCIATE

INCAS
Exclusive Natural Leather

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