



THE LINEN

NATURAL, ELEGANT, EUROPEAN

NORMANDY,

JUNE,

IT'S A SPECIAL DAY:

TODAY THE LINEN

IS FLOWERING.





THE MEADOWS ARE COLOURED IN LIGHT BLUE REACHING DOWN TO THE SEA, DEFYING THE WIND AND RAIN LASHING THE NORTH OF FRANCE. EACH SINGLE FLAX PLANT CAN BEND OVER AND RIGHT ITSELF SEVEN TIMES WITHOUT BREAKING, FLEXIBLE AND TOUGH.

EACH TINY BLUE FLOWER, ELEGANT AND DELICATE, LIVES FOR JUST HALF A DAY. THE SAME MEADOW, BLOOMING IN THE MORNING WILL ALREADY BE TURNED BACK TO GREEN BY THE EVENING. WITHIN A TIGHT TIMEFRAME OF TWO WEEKS, ALL THE SMALL AND IMPALPABLE FLOWERS WILL DISAPPEAR, TO GENERATE VERY DURABLE FIBRES THROUGH THEIR STALKS. IN THE LONG, THIN STEM ARE HIDDEN ALL THE VIRTUES OF A PLANT THAT HAS A HISTORY OF MILLENNIA, THAT ACCOMPANIED THE CHANGES OF ITALIAN AND EUROPEAN LANDSCAPE.



NORMANDY IS A REGION WITH A PARTICULAR CLIMATE:
ITS PROXIMITY TO THE OCEAN ALLOWS ALTERNATING RAIN, SUN AND WIND
TO ENCOURAGE THE GROWTH OF FLAX





THE CULTIVATION OF FLAX

The best terrain for the cultivation of flax is found mainly in France, Belgium and the Netherlands, covering an area of 75,000 hectares. There is no coincidence: the soil in this area is particularly suitable for this crop, the climatic conditions are right and the competence and experience of flax growers have been handed down from father to son, a priceless treasure.

It is from these lands that comes the linen selected by the Albini Group.

The flax is sown between mid-March and mid-April. The seed is deposited uniformly to a depth of 2-3 cm, to protect it from the wind and encourage it to grow in the best condition.

The wisdom and experience of flax growers are critical at all stages of the cultivation of flax: the Albini Group have chosen to entrust the care of their linen production to the jurisdiction of the flax growers association & cooperative “Terre de Lin”.

The flax growers understand how to choose the best seeding conditions required to ensure the homogeneity of the crop: sowing should not be too dense to allow the plant to have the necessary space to properly grow, neither should there be too much space between the plants, which should act as one body together to confront the relentless forces of wind and rain. The optimum density forces the plants to project upward in search of light and air and to develop long stems, light and strong, ready to draw waves with a minimum gust of wind.

Why is the linen of Normandy so special?

Normandy is a region with a particular climate: its proximity to the ocean allows alternating rain, sun and wind in a perfect manner to encourage the growth of flax with a correct development of the plant. The fields have a soil rich in nutrients for the plant.

The flax growers in this area have a know-how that has been handed down from generation to generation and allows them to cultivate the best linen, improving their quality every year. The experts of flax growing can with just a glance see if the flax in flower will lead to a good harvest, even if the result will be very much influenced by climatic conditions during all stages of maturation of the plant. In particular, the flax-growers association, Terre de Lin, share their experiences through a cooperative and their research centre for innovation in seed varieties for flax production.

RESEARCH AND INNOVATION FROM SEED

Not all seeds are suitable for the cultivation of quality flax. Selecting the right seed is a complex process that continues unabated year after year. The varieties of flax are indeed innumerable. Terre de Lin constantly research to propose to the flax growers only the best. Every year they began a new process of natural selection; 20,000 varieties are sown by choosing the mother and father seeds and by crossing between them naturally. This method of genealogical selection requires around 10 years of development to a new species.



THE FLAX IS SOWN BETWEEN MID-MARCH AND MID-APRIL

Terre de Lin, partner of Albini Group

Terre de Lin is the largest linen cooperative in Europe, with over 600 member farmers who cultivate 10,000 hectares in Normandy, in the departments of Seine-Maritime and Eure.

After harvesting the stalks in the fields, the flax fibres are extracted, in five production sites, for an annual quantity of production of scutched linen around 16,000 tons. The main activities of the cooperative are the creation of seed varieties, seed production, the promotion of the culture of flax, the extraction and processing of fibres for scutching, combing and enhancement of all products related to the cycle of flax. The cooperative sells scutched linen and derivatives from the flax production.



THE FLAX PLANT

Consists of a single stem, the flax plant, a long and flexible herbaceous plant, can achieve approximately one metre in height. The blue flower is nothing more than a tiny capsule composed of five lobes, each of which contains 2 seeds. The seeds are smooth, flat and generally reddish brown in colour, they are light and small and slightly curved at the tip. The stalks, containing the fibrous bundles, are arranged longitudinally, with the elementary fibres immersed in pectin. Flax is characterised by rapid growth, and its vegetation period is about 100 days. During the growing phase ideally the temperature should not be too high since if the flax grows too quickly it could collapse under the force of the wind. Europe remains the best production area for linen since the flax grows best where the soil is relatively warm and humid, there is a good exposure to the sun and the nights are cool.

The time of harvesting, between July and August, is among the most sensitive of the whole process of cultivation of flax, since at this stage the weather must be dry.

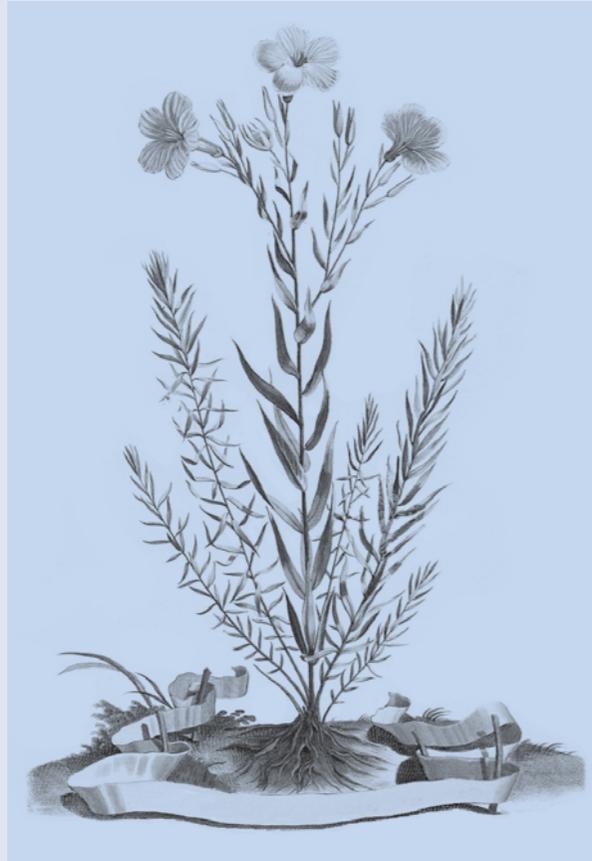
At harvest, the plant must be pulled out from the land to its complete height, and this is the secret. Only in this way can the maximum length of the fibre be assured.

The centre for cultivation research of Terre de Lin studies the best methods of soil preparation, the choice of the seed, the care of the cultivation, the processes of extraction and transforming the fibre by scutching and combing, ensuring that the "linen culture" is not lost over time. For over 30 years Terre de Lin has applied a strict policy of zero - polypropylene, using only threads in linen instead of synthetic materials.

Terre de Lin upholds the values of cooperation, transparency and sustainable development.

Albini Group collaborates with Terre de Lin sharing all the fundamental principles and values.





LINUM USITATISSIMUM



THE WISDOM AND EXPERIENCE OF FLAX GROWERS ARE CRITICAL AT ALL STAGES



ALBINI GROUP



THE GROWTH PERIOD OF FLAX IS ABOUT 100 DAYS



THE FLAX MUST BE RETTED TO MATURE

Once pulled out the flax is left on the ground, deliberately at the mercy of the rains that trigger the process of maceration. Once again nature has to take its course. This promotes the degradation of the stems through the enzymatic action of micro-organisms (fungi and bacteria) naturally present in the soil. The decomposition is activated by humidity, wind and the mild temperatures, eliminating the ligaments of the stems allowing the fibrous bundles to be separated from the coating substances, thereby facilitating the subsequent extraction. In the middle of the period of retting all the stems are rotated to ensure right uniformity of the process. For the retting on the ground the flax growers do not resort to any treatment, since the process is entirely natural. Depending on the weather conditions, the length of retting can range from two weeks to three months and it is crucial to understand the right time of removal from the flax field: since whilst the rain improves the level of quality, on the contrary, an excessive wetting may in fact destroy it.

*The characteristics of Linen fibre.
It has the following features:*

- *Toughness (6-7 grams / denier)*
- *Resistance to heat (up to 2300 C)*
- *Resumption of moisture (up to 12%)*
- *Dimensional stability*
- *Good density*
- *Weak elongation at break*
- *Low sensitivity to abrasion*
- *Excellent heat conductor*

THE TIME OF HARVESTING, BETWEEN JULY AND AUGUST

Once retted, with the right degree of humidity, the plants are lifted mechanically and pressed into large bales which, after a brief appearance in the fields, are stored until extraction of the fibres. If collected in the right conditions, flax is able to be preserved for long without degrading. The members of the Terre de Lin only use linen threads to secure the bales and to avoid any contamination with other materials. All bales are identified with a label that shows the references of the field and the farmer, so that each individual harvest is recognisable and can be collected and divided in the later stages (perfect traceability).

To extract the fibres from the stalk it is necessary to scutch the plants, removing the woody residue from the centre of the stem. The operation is known as scutching. The longest staple fibres are hand-selected at the exit from the turbines and are classified based on their characteristics and colour. The cultivation of linen is a niche culture, representing less than 1% of the global production of textile fibres.

The thousand lives of linen

From the linen fibre, yarns are obtained to make fine fabrics ideal for clothing or fabrics with more body for furnishing, decoration and household linen.

The particularly oily flax seeds are suitable for the production of oils and industrial paints and bio-fuels. They can also be used for foodstuffs, whole or processed, to create oils and flours.

The seeds are also used in beauty products, in particular for hair care.

The scraps of the plant have also a woody component, which makes them suitable for the production of agglomerated panels and fuels.

Even the dust of the linen process is useful for organic fertilisers.

Linen has been used for the paper cover of this brochure.





ONCE ERADICATED THE FLAX IS LEFT ON THE GROUND, AT THE MERCY OF THE RAINS
THAT TRIGGER THE PROCESS OF RETTING



THE PROCESS OF RETTING IS ENTIRELY NATURAL



ALBINI GROUP



THE MEMBERS OF THE TERRE DE LIN ONLY USE LINEN THREADS
TO SECURE THE BALES AND TO AVOID ANY CONTAMINATION WITH OTHER MATERIALS



TO EXTRACT THE FIBRES FROM THE STALK
IT IS NECESSARY TO SCUTCH THE PLANTS







THE LONGEST STAPLE FIBRES ARE HAND-SELECTED AT THE EXIT FROM THE TURBINES AND ARE CLASSIFIED BASED ON THEIR CHARACTERISTICS AND COLOUR





LINEN IS SUSTAINABLE



Linen needs the know-how of generations of flax growers to assure quality. This characteristic keeps the production rooted to the territories of origin, contributing to the economic and social wellbeing of the growing areas. Linen is a fibre which is European by history and tradition. The entire process of quality linen production takes place in Europe, limiting the transportation impact and encouraging the employment of those communities that traditionally have been dedicated to the processing of this special fibre. Terre de Lin applies a fair policy of shared remuneration of the flax growers, based on the quantity and quality of the fibres and seeds produced.

Linen is eco-friendly

Linen produces no waste since all parts are used.

It does not need watering, since it is the alternation of sun and rain typical of the regions of Western Europe that cares for its growth.

Insects and pests naturally do not “attack” the flax plant and therefore it can be cultivated using just a few pesticides.

One hectare of flax holds 3.7 tons of CO2 each year.

The cultivation of flax is perfect for crop rotation. Every 6-7 years alternating linen with other crops allows an optimal quality of the soil and increases its productivity in a natural way by up to 20%.

After maceration on the ground, plant debris fertilise the soil for the best crops in years to come.

HOW TO UNDERSTAND WHAT IS A QUALITY LINEN FIBRE?



Terre de Lin look carefully at some features of the fibres taken from the bundles to evaluate quality linen. The bundles should be oily and grey, if they are too blond then the quality of the linen is lower; it's necessary to manually test the strength of the fibre, obviously the stronger fibre results in better linen. The fineness of the fibre grade can be seen by trying to break down the fibrous bundle and then observe the uniformity of the beam. From the very first analysis the technicians of Terre de Lin can attest a level of quality. Only the best linens will be selected for the Albini Group.

The European Confederation of Flax and Hemp (CELC)

The European Confederation of Flax and Hemp (CELC) is the only European agro-industrial organization federating all the players of production and transformation for flax and hemp. It is the privileged spokesperson for 10 000 European companies and oversees the path of the fibre development from plant to finished product. Created in 1951, the CELC incites reflection, market analysis, industry concertation and strategic orientations. Its actions, stimulate innovation and rely on the value of these natural fibres with their proven environmental qualities. Through its Textile section, it assures the promotion of the European industry in the areas of fashion and lifestyle. With its European Scientific Committee and the Technical section, CELC helps members move towards the future to discover new technical opportunities. Terre de Lin, Linificio e Canapificio Nazionale, Albini Group take part in CELC.





THE TAPESTRY OF BAYEUX IS CREATED JUXTAPOSITIONING NINE LINEN FABRICS, EMBROIDERED WITH A WOOL YARN, 1066-1082

THE HISTORY

The history of linen is intertwined with that of the great civilisations of the Mediterranean basin and in times closer to us, with that of the European peoples.

The use of linen dates back to 8,000 years BC, but the variety of flax that even today we know comes from Egypt, witnessed by paintings dating to 6,000 BC. The Egyptian linen had a level of perfection otherwise unattainable for the time and this made for an important foreign trade market.

The perfection of the linen that arrived in Europe, thanks to the trade of the Phoenicians, who understood the importance of the fibre purchased from Egypt, contributed to the production and resale of linen fabric extensively in the territories of Ireland, England and Brittany.

It was during the period of the Roman Empire that linen experienced a real golden age in Europe. The Romans, thanks to the conquest of Egypt, made extensive use of fibre, both in clothing, and for household linen. The government, in order to fill the high demand, established colleges to prepare the workforce, particularly in the furthest provinces, from Gaul to Germany, to England.

Particular uses of linen in history

In ancient Egypt the mummies were wrapped in hundreds of yards of linen bandages.

The Shroud, the burial cloth on which you can see the image of Jesus, was a linen cloth used for wrapping the body of the Christ in the sepulchre.

“He wore a shirt and linen breeches and over this a tunic with a narrow band of silk”. So was described the Emperor Charlemagne.

The Knights Templar dressed in linen, a long white shirt, tied at the waist by a belt and trousers, always in linen.

In this manner it was discovered that the best soils for growing flax were located in France and Flanders, places that in the period between the Middle Ages and early Renaissance become the real capital of linen, with Bruges representing a centre of excellence.

With Charlemagne in Europe, shirts and linen trousers were universally adopted, first as a preventative against skin diseases and then as a hallmark of elegance. However it was during the Renaissance that linen really triumphed: already customary as household and bed linen, linen came into fashion for every sort of fine clothing. Not only for intimate apparel, but also for shirts, collars and details that enhanced the beauty of the wearer. Luther's Protestant Reformation and the religious wars which followed, however, were significant reason for migration. Thousands of skilled weavers fled to England and Ireland, while France remained the primacy of linen, both in the cultivation and in the workmanship.

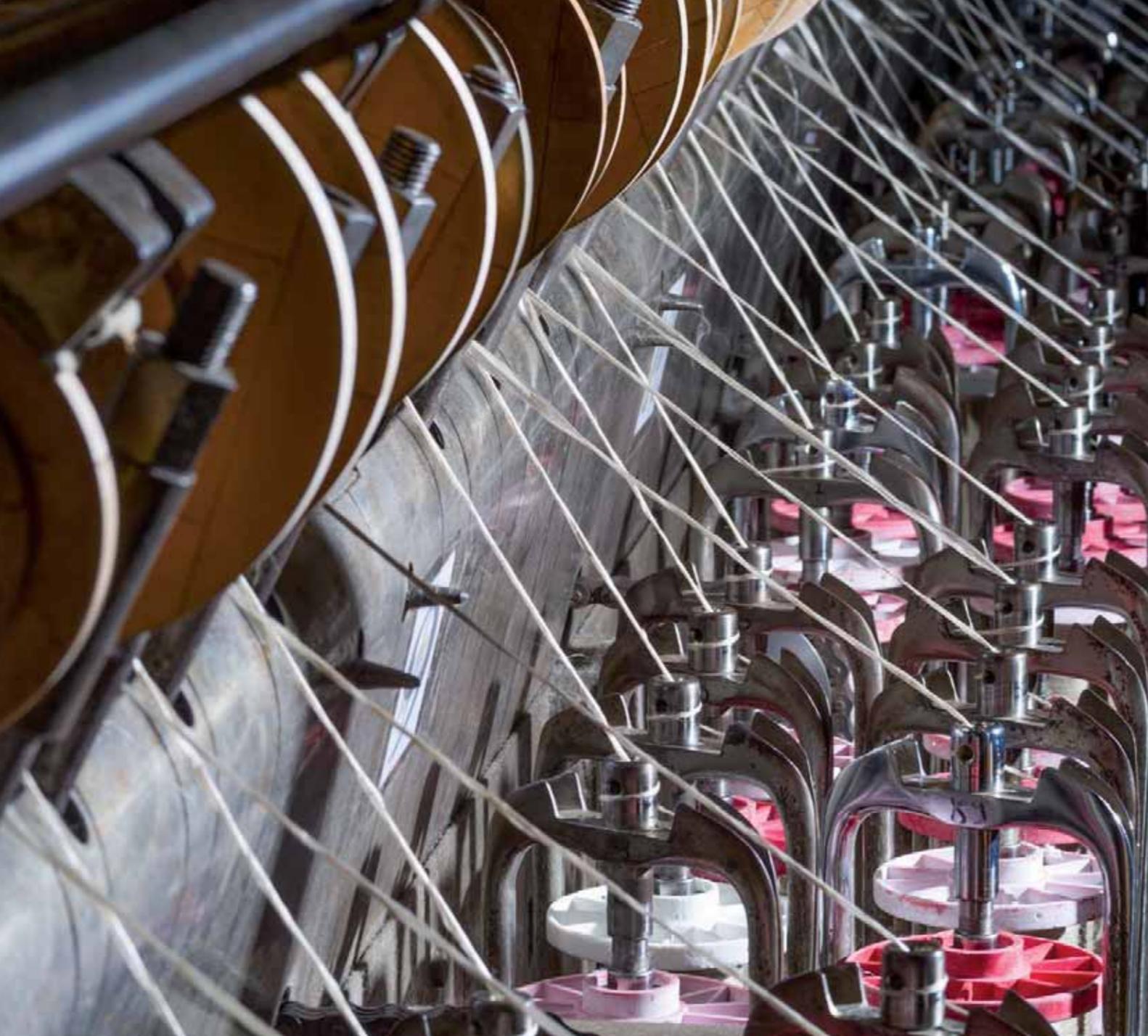
The richness and sophistication of linen remained linked to the manual production until the nineteenth century, when Philippe de Girard, noble Provençal and great inventor patented a machine for spinning linen.



LINEN FABRIC
TACUINA SANITATIS, XIV SEC.

A WOMAN
ROBERT CAMPIN, 1435 CIRCA





THE UNIQUE EUROPEAN SUPPLY CHAIN

From the field of Normandy, the transformation of the linen continues in Italy, in Bergamo province. The Linificio e Canapificio Nazionale transform the valuable long fibres into yarn, thanks to the use of the most modern spinning technologies. The process occurs in four main steps: combing, pressing, bleaching and spinning the linen. By combing the fibres are passed through combs becoming progressively finer, are cleaned, parallelised and standardised to prepare the continuous combed sliver needed for subsequent machining. The Linificio mill machinery performs this step only with wooden cylinders. These are treated and maintained manually, as well as the combs, to avoid leaving residues of previous processing, thus avoiding the contamination of the various mixtures of linen.



THE COMBED SLIVERS ARE STRETCHED AND COUPLED,
COMPLETING THE PARALLELISATION AND THE ALIGNMENT
OF THE FIBRES, TO BECOME ROVES

*Linificio e Canapificio Nazionale,
partner of Albini Group*

In 1873 the Linificio e Canapificio Nazionale was founded by Dr. Andrea Ponti, bringing it into the factories of Cassano and Fara, which added to that of Crema in 1875, the company already owned by Maggioni & C. Considered one of the oldest companies in Europe and a symbol of Italian excellence in the production of flax and hemp, its first activities are focused on wet & dry spinning. After only three years in 1876, it was already the third Italian company listed on the Milan Stock Exchange. With the acquisition of several manufacturing plants in both the North and the South of Italy, the company sought to become a reference point in a worldwide perspective.

The combed slivers are stretched and coupled, completing the parallelisation and the alignment of the fibres, to become roves ready to create the yarn, after the bleaching. The actual spinning irons, refines and twists the fibres to obtain cohesion of the yarn. It requires the most modern spinning machines and the experience of skilled technicians to create the finest and most precious yarn counts. The Linificio use the sophisticated technique of wet-spinning with water heated to allow the fibres to swell, favouring slippage between them to create a greige yarn that is fine and durable. The final steps involve winding and yarn cleaning, to remove any remaining impurities and to wind it onto the special cones suitable for dyeing.



WET SPINNING

The period between the wars allowed the Linificio to consolidate its growth and its production for the domestic and international market. In 1985, the Marzotto Group acquired the majority stake of Linificio (54% stake). In 2003, the merger with Zignago Textiles SpA, the second spinner in Europe for linen. Today Linificio is controlled 100% by the Marzotto Group. Linificio e Canapificio Nazionale is synonymous with the highest specialisation of the production and quality of the finished product.

BY COMBING THE FIBRES ARE CLEANED, PARALLELISED AND STANDARDISED





COLOURING THE LINEN

Through Linificio, Albin Group receive the beautiful linen grown from Terre de Lin and begins to prepare the precious yarn to be woven.

Dyeing, preparation and weaving take place in Italy, with the utmost care and attention in the factories of Albin Group.

Linen yarn is very durable, but also typically irregular. These features require a number of specific precautions and special arrangements during the dyeing and weaving process. A special winding of the yarn cones permits the Albin Group to obtain a uniform dyeing both in and outside. Each single yarn of linen, in the phase of preparation of the warp, is coated by a protective wax which makes it even more resistant and more sliding for subsequent processing. In this way possible damage to the warp, due to the irregularity of the yarn can be avoided.

The equipment employed is being constantly renewed thanks to a substantial continuous investment programme. All the machinery is “state of the art” and incorporates advanced technologies.

Technical advantages of linen

*High moisture absorption.
Maximum comfort especially in summer clothing. The absorption capacity is appreciable even for sheets, pillowcases, towels and handkerchiefs.*

*More strength both wet or dry.
Linen fabrics can be washed repeatedly as required, a fundamental quality for clothing, household fabrics and handkerchiefs.*

A SPECIAL WINDING OF THE YARN CONES PERMITS THE ALBINI GROUP
TO OBTAIN A UNIFORM DYEING

The weaving, produced by Albini on high-tech weaving looms, is carried out by highly experienced technicians, taking the utmost care, in a controlled environment.

Temperature and humidity are regulated according to the needs of the fibre, the looms travel at greatly reduced speed with the maximum attention of the staff. In addition to careful monitoring during the previous processing, all loom-state fabrics are visually controlled by skilled inspectors at 100%. In Italy, in the Albini Group finishing mill in Brebbia, the fabrics are finished to remove all the impurities of the process and revitalise the natural characteristics of this wonderful fibre.



Very low elasticity.

Linen fabrics are dimensionally stable and do not deform with use nor with repeated washing with water or dry cleaning. For this valuable property, linen is suitable for making curtains, wall hangings, artist canvases and clothing.

It is anallergic.

Linen is a natural fibre that promotes the well-being of the organism. Given the characteristics of softness, of immediate absorption and evaporation of liquids, faster elimination of heat and humidity, linen is particularly suitable not only in the treatment of allergies, but also in their prevention and personal hygiene in kind.





LINEN: A THOUSAND EMOTIONS

Linen embodies the creativity of the Designers of Albini Group. A raw material with a strong personality allows a huge range of stylistic experimentation, but remains always the protagonist in “being able to move”, to differentiate and characterise a fabric.

Elegant, sophisticated, even when a little rustic but refined, linen has always moved with the times while remaining current with colour tones that have made it more classic or sporty depending on fashion trends. From the finest fabrics for the most innovative garments, linen is the object of desire of most illustrious Creatives in the world, changing the rules, starting from the essence of the raw material to design the garment.

From traditional natural colours of the sand of the most pristine beaches, to the warm spicy, African colours tones, vivid, brilliant, quirky, sometimes fluorescent. Very interesting is the use of fading and washed yarns that combine the vibrancy of the normal colour tones, but are transformed over time and are mixed, taking unusual and surprising gradations.

Each season, the linen is reborn in the Albini collections, using precious yarns in Normandy linen, up to the finest counts; showing many aspects, textures, and original hand feels, more compact or with plays of transparency, thanks to the skill of those who today plasma this matter of great tradition, demonstrating a new way of being and with a touch of exclusivity in all its interpretations.

Noble materials, in line with the codes of luxury that are aware of the elegance and refinement of a natural product, the symbol of a new contemporary lifestyle, environmentally friendly and attentive to sustainable development.

Today, linen has also learned to be versatile in the content, enriched in the blends, from pure linen to cotton-linen, linen-silk, denim-linen, to the flannel linen for a fabric that has transcended the seasons, thanks to the skills of Albini Group's Designers interpreting the many capabilities of this fibre. Manifold even in the ennoblement, by finishing with a dry texture, a rediscovered rustic, towards softness.

The linen, an European product of excellence to satisfy the most exclusive customers in the world.





ALBINI GROUP







NATURAL,
ELEGANT,
EUROPEAN.

THANKS TO CELC, TERRE DE LIN, LINIFICIO E CANAPIFICIO NAZIONALE
FOR THE KIND COOPERATION

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