The trend toward body-fitting yet comfortable fashion apparel is very demanding and challenging. Stretch garments are playing an important role inside this scenario, denim jeans and leggings are highly requested, especially for womenswear. Keeping up with this trend of stretch denim, many yarn & fabric manufacturers are offering dual core yarns with improved recovery and strength, while retaining the comfort of cotton next to the skin.
Dual-core spun yarns are a combination of two different stretch products such as LYCRA® fiber and LYCRA® T400® fiber; this yarn increases stretch power and provides great shape conformity for advanced comfort. This stretch technology hidden within the yarn eliminates the “bagging knee syndrome” and creates a new standard for superior shape retention and recovery performance, providing a soft cotton hand and natural appearance. The technology has relevance not only for jeans and trousers, but also for denim leggings that lately have become popular. The added strength provided by polyester helps these fabrics withstand bleaching and washing techniques, even on denim with treatments such as antique finishes, whisker washing and sandblasting.
The technological developments of special yarns for following fashion trends require constant innovations on the machinery technology too. **Savio automatic winders can easily process special and challenging yarns; now the most demanding product is the dual core spun yarns. The Savio winding unit is equipped with clearing, splicing and tension control devices for ensuring perfect splices and perfect package shape.**

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COMPANY WITH MANAGEMENT SYSTEM CERTIFIED BY DNV GL
= ISO 9001 =
= ISO 14001 =

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IMPRESA STORICA D'ITALIA

YARNS THAT FOLLOW FASHION

ADVANCED TECHNOLOGY ON SAVIO CONE WINDERS FOR PROCESSING MOST DEMANDING PRODUCTS:
SINGLE CORE YARNS, DUAL CORE YARNS

Savio

SINGLE CORE SPUN YARN

DUAL CORE SPUN YARN

SPLICING TECHNOLOGY

TWINSPLICER
The way the splice is prepared and made, ranks the Twinsplicer at the top among all other splicing devices. The splicer strength is always above 95%, keeping the appearance the same as the parent yarn. The splicer on compact yarns, besides offering the strength, needs to provide an extremely good appearance not to create a visible defect on the finest fabrics. The Twinsplicer for core yarns preserves the elastomeric filament entirely inside the splices.

Main application range:
- Cotton 100%
- Cotton 100% Effect yarns
- Compact Yarns
- Elastomeric yarns
- Cotton and blends

HEAT-SPLICER
The consolidated experience on the splicer air technology in combination with the use of the heat, guarantees a final splice with excellent appearance, high and consistent strength even with difficult yarn structures, different blended materials and high twisted yarns.

Main application range:
- Carded wool coarse counts
- Mule spun yarn
- High twist yarns
- Wool 100% and blends

MOISTAIR® SPLICER
A common problem faced by the stretch fabric manufacturers is the breakage of the yarns during production. Savio offers a new splicing technology, combining air and water, which has given perfect results in this area.
MOISTAIR® 6901 splicer gives the best performance with elastic core yarns. MOISTAIR® is an innovative air splicer using a very small quantity of water (spray). It is endowed with a water valve with a dosage setting to moisture the splice. Suitable for almost all kind of short and long spun yarns, with the exclusion of plied cotton, high twisted wool yarns and linen. The MOISTAIR® has delivered superior performances on TENCEL® and fine counts fabrics.

Main application range:
- Short and long spun yarns
- TENCEL®
- Elastic core yarns
- Very fine cotton yarns
- Coarse and slub yarns
- Dual core yarns

SINGLE CORE SPUN YARN

Core spun yarn is created by twisting staple fibers around a central elastomeric filament core, usually made of LYCRA® fiber. Different basic fibers (short and long staple) are commonly used: cotton, viscose, siro, woolen blends.

Splicing technology
Moistair® splicer:
Short staple cotton. High quality yarns of cotton, cotton with LYCRA® fiber, polyester/viscose/ LYCRA® fiber, TENCEL® fiber, lyocell blends. Universal splicer through moist selection provides highest versatility.
Twin splicer:
Short staple cotton. All cotton yarns with or without LYCRA® fiber, Denim, Compact Cotton and Cotton with LYCRA® fiber. The Twinsplicer, the unique selling proposition of Savio, provides top quality splice.
Heat splicer:
Long staple. High twist (single and double) and worsted wool.

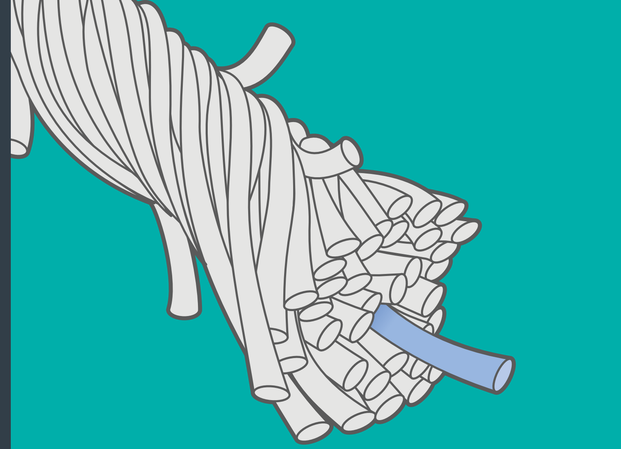
DUAL CORE SPUN YARN

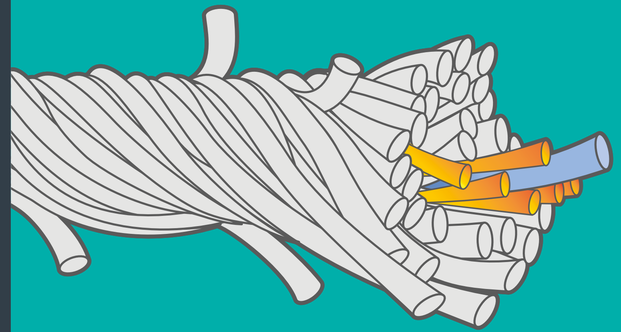
Dual core spun yarns are made of three components: a core filament - mainly LYCRA®, a polyester multifilament as T-400® and a cotton fiber. This special yarn offers improved recovery and strength compared to traditional core spun technology.

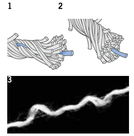
Splicing technology
Moistair® splicer:
Short staple cotton. High quality yarns of cotton, cotton with LYCRA® fiber, polyester/viscose/ LYCRA® fiber, TENCEL® fiber, lyocell blends. Universal splicer through moist selection provides highest versatility.
Twin splicer:
Short staple cotton. All cotton yarns with or without LYCRA® fiber, Denim, Compact Cotton and Cotton with LYCRA® fiber. The Twinsplicer, the unique selling proposition of Savio, provides top quality splice.

T400® TECHNOLOGY BY LYCRA are trademarks of INVISTA

TENCEL® is a registered trademark of LENZING Group for lyocell fibers







1 Improper spinning into the fiber strand
2 Perfect spun into the fiber strand
3 Typical fault core yarn

CLEARING OF CORE YARNS
The structure of core yarns is a special challenge during quality control. One of the typical faults is the so-called strip-back. Due to a slippage between the inner elastomeric filament and the staple fiber, the core is not completely covered with the cotton fibers. As elasthane and cotton have different characteristics during dyeing, these faults can become visible in the final product. The yarn clearer Zenit+ from Loepfe with the optional LabPack is able to identify these faults. The yarn clearer can utilize an optical method to identify faults during winding; also faults in core yarns can be identified. This gives the Zenit+ an advantage compared to capacitive yarn clearers, which detect only the overall mass of the yarn.

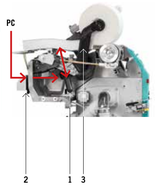
The Zenit+ can also monitor the splicing joints, and thereby identifies splicers, which are permanently producing non-optimal splice joints.

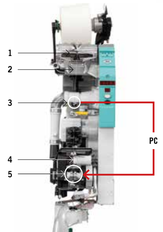
COMPUTER AIDED TENSION
The winding tension is detected continuously by the Tensor, which interacts with the yarn tensioner device, through the machine PC, in order to adjust the load on the yarn as required. The Tensor, being positioned just before the drum, detects online the real winding tension. The sensor does not have any movable part and performs as "anti-wrap system".
TENSORFLEX
In presence of elastomeric yarn blended with wool/cotton, the tension values must be diversified during the package formation to ensure a perfect shape.

C.A.D. - DENSITY CONTROL (OPTIONAL)
Beyond the winding tension control, the package density and formation depends on the contact pressure of the package on the drum. The load of the package on the drum is controlled by an "electronic/ pneumatic" system, which adjusts the pressure of the counterweight piston, in accordance with the density value required for the package. Special yarns (elastomeric and very fine yarns), especially for dyeing packages, may require a very severe control of package density.

1 Piston
2 Electronic/pneumatic valve
3 Cradle

WINDING UNIT





1 Drum
2 Traverse
3 Tension sensor TENSOR
4 Waxing device
5 Yarn tensioner