Manmade cellulosic fibres (MMC), including Viscose/Rayon, Lyocell and Modal, are the second most important group of cellulosic fibres after cotton, and rapid growth is expected for this fibre group in the future.

MMC come from plants, most often trees, which are chipped and processed into pulp before being processed into fibers. The basic raw material is wood, typically from relatively fast growing species such as eucalyptus, pine, and beech. Viscose/Rayon is the most common MMC. To transform wood pulp into fibre, the pulp undergoes a chemical-technological process that involves multiple steps. The process involves high use of chemicals, energy, and water.

TENCEL® is a branded lyocell and modal fiber, it is much preferred to other types of MMC fibres such as Viscose/Rayon, due to much better environmental performance. Being from a renewable source and usually biodegradable, MMC fibres are often seen as an attractive alternative to synthetic fibres.

The benefits of using TENCEL® lyocell and modal include the traceable and sustainable origin of the wood pulp, and the use of a closed loop solvent and water recycling process. In addition, TENCEL® is a high-tensility cellulosic fiber, which gives high strength properties to the fabric.

TENCEL® may be used for knits, shirting, active wear, denim and other apparel applications. Its properties are similar to that of cotton and it is valued for softness and breathability. A very soft fibre, TENCEL® is also known for having an attractive drape, fluidity, and wrinkle resistance. Brilliant in color and luster, TENCEL™ fibers are also known for being exquisitely soft and pleasant to the skin. Blending TENCEL™ modal with other fibers significantly improves softness properties of fabrics, enhancing overall comfort. It is highly dyeable and can be produced in vibrant colors. It may be blended with any natural or synthetic fibre to produce a variety of textiles, and can be finished in many processes depending on desired effect.

It can be used as 100% Tencel® textile, or blended with cotton to produce a stronger textile, wool for a higher absorbent textile, rayon for better stability than 100% rayon, or with polyester or polyamide for functional sportswear.

Features of TENCEL® fibers:
• Botanical origin
• Sustainable production process
• Color retention
• Enhanced breathability
• Long-lasting softness
• Gentle on skin, non-irritating
• Durable
• Reduced bacterial growth
• Strong dimensional stability
• Rapid and deep dyeing

TENCEL® is a trademark of Lenzig AG
THE SPINNING TECHNOLOGY IS DECISIVE FOR THE TYPE OF YARN TO BE OBTAINED. TO DECIDE WHICH TECHNOLOGY IS BEST SUITED TO YOUR NEEDS, SAVIO OFFERS NUMEROUS SOLUTIONS TO SUPPORT THE QUALITY OF THE FINAL YARN PRODUCT. ACCORDING TO THE COMPLEXITY IN THE PRODUCTION PROCESS OF TENCEL® FIBER, SAVIO PAYS GREAT ATTENTION TO YARN CONTROL DURING THE WINDING PROCESS.

Phased Air Splicers
Air and Moistair® splicers boasts a Duo Air Feeding system, for yarn tail preparation and splicing. This splitting allows the individual setting of the most appropriate value of air pressure, and makes these splicers able to easily process any different fibers and blends combination.

Jointair Splicer
Settings are completely centralized in the PC:
- Fast and simple change
- Consistent uniformity of splice in each different spindle
Main application range:
- Cotton 100% and blends
- Cotton Compact yarns
- Fancy yarns
- Core yarns
- Synthetic and artificial yarns
- Silk

Moistair® is an innovative air splicer using a very small quantity of water (spray). It is endowed with a water valve with dosage setting to moisturize the splice. Suitable for almost all kind of short and long spun yarns. The Moistair® has delivered superior performances on TENCEL® and fine counts.

Jointair Splicer
Settings are completely centralized in the PC:
- Fast and simple change
- Consistent uniformity of splice in each different spindle
Main application range:
- Short and long spun yarns
- TENCEL®
- Elastic core yarns
- Very fine cotton yarns
- Coarse and slub yarns
- Dual core yarns

Yarn quality and costs are decisive criteria in the highly competitive textile market. In downstream processing, the unwinding behavior of the package and the take-up speed facilitate process to be more efficient and geared to benefit. The EVO drums offer new capabilities to optimize both the unwinding speed of the packages and the package yarn content, through variable number of turns with different winding angles. The technological developments of MMF yarns for following fashion trends require constant innovations on the machinery technology too. Savio has now a full range of grooved drums to cover all yarn types, counts and downstream processes. The package shape is optimized in order to obtain advantages for a better unwinding ratio in the downstream process, for homogeneous package density and for lower rewinding breaks.

- 3/2 EVO
  ALL STAPLE FIBERS MEDIUM AND FINE COUNTS
  FEATURES & TEST RESULTS:
  • LOWER REWINDING BREAKS -30%
  • HOMOGENEOUS PACKAGE DENSITY

- 2 EVO
  ALL STAPLE FIBERS COARSE MEDIUM COUNTS
  FEATURES & TEST RESULTS:
  • Higher package content
  • Even Hardness performance
  • Wider winding angle to fit better coarse yarns
The Savio winding unit is equipped with control devices for ensuring perfect density, metering and perfect package shape. These unique devices contribute to produce packages without ribbon and ensure the minimum possibility of breakage, slough-off during unwinding at a very high speed, particularly in fine count, results into higher efficiency in Weaving & Warping department.

1. Electronic anti patterning system
   It operates at critical diameters by modulating the drum speed. All the critical ratio between package and drum diameters are memorized by the computer and consequently the drum is accelerated and decelerated, according to variable ramps, when there are possibility of ribboning formation. The system operates also during the acceleration after the splicing cycle.

2. C.A.P - Computer Aided Package® (Optional)
   It gives a perfect package, ribboning free and at constant drum’s speed. The computer checks the distance between two consecutive layers, and modifies the ratio between package and drum diameters by micrometric variation of the inclination of the package cradle, and consequently of the driving point.

3. C.A.D - Computer Aided Density (Optional)
   • Package to drum pressure active monitoring.
   • The package weight increase is detected by the length metering.
   • Customized package load curve.
   • The relevant parameters are programmable and stored in the machine PC. The system is especially studied to process compact yarn producing soft packages for Dyeing (0.32 / 0.35 g/cm³).

“R” VERSION allows rewinding of packages of any taper, producing packages ideal for any subsequent use. The main fields of use are rewinding packages coming from the dyeing process, packages of different shapes and contents, packages coming from Open End spinning frames and packages remains.

Available on:
- Eco PulsarS Plus
- Polar Evolution

QUALITY TEAM PLAYERS

Available on:
- Eco PulsarS Plus
- Polar Evolution
INNOVATIVE AND DIVERSIFIED PRODUCT PORTFOLIO FEATURING BEST-IN-CLASS TECHNOLOGICAL KNOW-HOW

Since 1911, Savio has always looked to stay ahead of competition and predict important development across the global textile industry. As a leading supplier of winding machines for manufacturing yarns from short-staple fibers, Savio offers products and services that are tailored to satisfy every customer needs. Savio offer consistent mix of quality and efficiency, providing state-of-the art technological solutions for yarn quality control and allowing best value-for-money proposition.

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We reserve the right to modify the characteristics of the machines described herein without prior notice.
The data given in this brochure are not intended as a guarantee.
Savio machines are equipped with safety devices in compliance with existing regulations.