



FADIS - The benchmark company for elastic yarns

This year Fadis celebrates its 58th anniversary, a leading company in the production of precision winding machines, owned by the same family since its establishment in 1960. The company specializes in the production of soft winders, rewinders, assembly winders, hank to cone winders, reeling machines, spooling machines and elastic yarn intermingling machines for the processing of any kind of yarn, from cotton, wool and silk to artificial and synthetic fibers, mixed fibers, intermingled yarns and fancy yarns.

In the past five-year period, sales have increased to staggering numbers: +100% with over 30 million turnover in 2017 and 2018 steadily growing. Fadis is now reaping the benefits delivered by choices made in the past, first of all, investments in product research and development.

Flexibility and internationalization are two of Fadis' strategic pillars. The company exports, on an average, 93% of its production to 70 countries, offering also post-sales assistance. It has representative



Ms. Raffaella Carabelli of Fadis SpA.

offices and several post-sales assistance offices in many countries, including the possibility of activating a remote emergency assistance system directly from the company's headquarters.

The company made the right choice by keeping the whole production based in Italy and working with 95% Italian suppliers: Flexibility in swiftly meeting the customers' needs, guarantee of total

quality (checks, tests) and the most prestigious certifications are the company's strengths.

Still challenges lay ahead of them. Fadis is now working on new forms of internal organization integrated with increased digitalization to reap the opportunities and benefits given by INDUSTRY 4.0. These are ambitious goals as this is a new revolution that will change again the manufacturing concept.

Evolution and revolution in elastic yarns: All in one

Fadis was the first company in the world to introduce the air covering technology in 1987. Today, 30 years later, its Sincro Multipla Airjet model is considered the benchmark on the market.

The "Queen" version has been completely renovated. This Sincro Multipla Airjet model foresees the application of an electronic motorised unwinding device necessary to unwind an elastomeric yarn with a perfect and regular draw ratio and to intermingle it through air with a textured yarn.

The air covering process consists of covering an elastomeric yarn with other continuous textured yarns. This process takes place through an air flow controlled by a special jet which opens the fibre of the covering yarn and closes it around the core (elastane).

As one can well imagine, this is a very delicate process where both the feed tension and the quantity of yarn entering the jet must be perfectly controlled so as to guarantee a homogeneous result of the intermingling points numbers and of their strength.

To solve this problem, Fadis, once again first in the world, has developed a technology, firstly introduced at ITMA Milano 2015, that allows the installation and integration of up to 4 electronic "Tens Control™" online tension devices on each spindle.

This device allows the user to set and constantly adjust online the tension of each ply entering the intermingling process, thus avoiding the continual

interventions of the operator to manually adjust the tension of each feed ply and to solve nowadays problems of irregular tension during feed bobbins unwinding.

This version with its high level of technology will satisfy the most sophisticated production requirements and guarantee the formation of packages with perfectly stabilized yarn.

Fadis has made efforts to meet the rising demand for new yarns types with elastic contents, with the introduction in 2016 of the revolutionary SINCRO MULTIPLA AIRJET DUAL CORE which is the evolution of the Sincro Multipla Air Jet.

This is a unique machine that allows to produce elastic air intermingled yarns both for direct weft end use on weaving machines or for ring spinning end use for core spun or dual core or tri DCORE yarns combinations. Other end uses are also hosiery and circular knitting.

Thanks to its configuration and to a very efficient use of the space, it is now

possible to double the output when using the machine with take up, up to 115 mm.

In fact, instead of winding one bobbin up to 115 mm on each spindle, it is now possible to wind simultaneously, two bobbins up to 115 mm on each position.

This is obtained thanks to the famous Fadis' "open platform system/ concept" so that, at the same time the machine can be used to produce on each spindle either one bobbin wound on a 10" tube single bobbin or 2 bobbins x 115 mm.

The conversion from 1 take up per spindle to two take up per spindle can also take place on existing machine.

All this is obtained without compromising on the features of the machine that are the same as the Sincro Multipla air jet, that made it so popular. It will also guarantee repeatable results which have become so essential in lean production methods/systems today.

Fadis will be present at ITMA ASIA + CITME 2018 in Hall 1, Stand E09. ♦



EFI Mezzera is one of the pioneers of indigo dyeing technology, that allows indigo denim production preserving up to 40% water, offering deeper indigo and

sulphur penetration, and 20-25% reduction of initial investment.

Indigo denim production with lower environmental impact is now possible,

decreasing drastically sulphites, sulphates and sulphidrates from drain water and fabrics. The new Looptex range by Mezzera, offers the advantages of the old Loop machines, with the latest chemical and mechanical technology, thus achieving darker casts, deeper indigo penetration, and improving color fastness.

Other advantages include:

- ❖ High flexibility in all processes, from indigo dyeing to sulphur dyeing, thanks to the small machine size and the sealed nitrogen reactors.
- ❖ Smaller machine size, up to 20% smaller than the smallest Slasher available in the market.
- ❖ Lower operating costs, which means up to 20% savings due to the reduced use of the indigo liquor bath.
- ❖ High fixation rate as fabric passes into the oxidation loop many times.
- ❖ Sustainability: Reduction of boxes but not the final speed, water and chemicals consumption, are lower than other ranges
- ❖ Slasher-loop: customization of the machine on customer requests, thus it is now possible to use LOOPTEX as a Loop or Slasher as well.

EFI Mezzera can be visited at ITMA ASIA in Hall H5, Stand D33. ♦