



Fadis SpA: Elastic yarn winding machines

Fadis offers high-end machines to process elastic yarns, both in packages as well as in hanks form. In 2003, Fadis launched an important technological innovation, the FAPP™ (Fadis Precision Package), a new technology which is able to satisfy most precise requirements of elasticized yarn dyeing.

In 2007 Fadis has presented an innovative machine for elastic yarns, the SINCRO M, a new concept of winding with precision crossing and electronic yarn guide system, that can reach speeds up to 1750 m/min.

With the SINCRO M machine, it is possible to produce FAPP™ low-density packages (FADis Precision Package), which allows for wide retraction margins of the yarn during the dyeing phase, thus keeping a high residual elasticity percentage of the elasticized yarn.

Therefore, with this widely tested technological system, and the possibility of unwinding the FAPP™ with the SINCRO RFM SW rewinding machine with its tension controlled motorised unwinding system, it is now possible to obtain qualitative results quite similar to Hank dyeing, but with the same simplicity and economy typical of yarn package dyeing.

The main features are presented here for the interest of our readers.

The fundamental innovation of this machine is the use of the precision crossing with electronic yarn guide and positively driven swift instead of a positively driven bobbin.

With the precision crossing with positively driven swift technology, it is possible to obtain FAPP™ with a perfect and controlled yarn laying, without patterning, which is a guarantee for their excellent unwinding at a constant tension, thus allowing to keep elasticity and a high performance during subsequent production phases.

With the positively driven swift with the adjustable circumference. It is possible to optimize FAPP™ formation according to the elastic characteristics of each single yarn. As each yarn has its own elasticity and its own retraction coefficient during the dye process, this additional features benefits the customer.

It is important to note that due to the possibility of adjusting the swift for every single article, the parameters may be optimized in such a way that various types of yarns have the perfect retraction margin during the dyeing phase, thus ensuring a high percentage of residual elasticity of the elasticized yarn after dyeing.



Thanks to this highly evolved technology, it is possible to process not only stretch polyamide yarns, but also all those elasticized yarns whose main prerogative is to maintain a high degree of residual elasticity after dyeing, such as Corespun yarns, covered elastomeric yarns, elasticized viscose, nylon PBT, polyester T400 and other similar yarns.

According to the diameter of the chosen swift, the produced FAPP™ may then be dyed either in a basket or in the column.

The machine can be equipped with a large diameter feed roller with a programmable speed for yarn overfeed (up to +70%).

Last but not least the machine can be equipped with an intermingling jet to intermingle 1 ply yarn to then reduce the problems of filament breakages/ separation during dyeing process or to intermingle 2 ply yarn. ♦