

# Biancalani: Innovative textile machines for finishing sector

Since 1957, Biancalani has been producing innovative textile machines for the finishing of woven fabrics, nonwoven fabrics and knitwear. These machines offer high performance results and improve the quality of the medium-to-low range fabrics, and enhance the qualities of more noble fabrics. Biancalani has been successful over the years in manufacturing machines for non-conventional finishing, and is continually searching for solutions that will enable it to give added value to textile products. The company is not just a manufacturer of machines, but also as a technological partner capable of assisting the customer in the choice and optimization of the processes most suitable for his needs.

## SPYRA® Compact

Secure in the success of the continuous version of SPYRA® with six and ten drums, Biancalani fulfilled the need – among those finishers who are obliged to work with limited production lots and prefer a discontinuous approach. SPYRA Compact is a machine that unites this principle and the advantages characteristic of work processes involving rope-form fabrics with those of tumblers. Definition of the new model has made it possible to obtain versatile and compact machine that can work both continuously: for drum treatments which can be carried out by means of a limited number (six/four) of tumblers, and discontinuously: for fabrics that need a more intense action through repetition of the passage in the four drums provided. Therefore, SPYRA® Compact is ideal for those firms, that are always on the lookout for quality and added value with a logic of efficacy and production efficiency.

SPYRA® Compact is able to produce NATURAL effects in discontinuous and continuous form with a brief cycle, which is important for customers, who create fashion and novel end products.

The Compact version of the already known SPYRA® is developed due to the fact that traditional discontinuous work process using drying drums (tumblers) is appreciated due shrinkage and volume results, which are to be obtained in the product. The machine provides finishing treatments, with special effects, which cannot be attained with conventional work processes

(e.g. with free dryers), without however encountering the treatment snags typical of discontinuous drums, namely:

- ❖ Industrialization difficulties, i.e. the difficult homogeneity and repeatability of treatment from fabric to fabric;
- ❖ Intensive use of manpower, for loading, unloading and untying the knots;
- ❖ Defects of knots and constrictions, which make a second impregnation and a new treatment necessary.

In many cases the processes of drying-compaction-softening in rope-form of fabrics, the most appreciable technical result is the one realized with a “tumble dryer”, that is, in a single drum in which the product is treated in discontinuous form on well-defined sizes.

This industrial procedure has productive and economic limits also in its technological validity. For this reason, the mechanical-textile industry has proposed more flexible machines, that provide treatments for open-form fabrics: relaxed dryers, i.e. machines that are capable of realizing on fabric the ennobling principles expressed by the single drum (tumble dryer), but in continuous manner.

When compared differently from the single drum machine for treatments of open-form fabrics and other proposals that, for reasons of productivity, provide simplification of process and a reduction of costs, but these options do not permit a mechanical action of structural compaction of the fabrics. Therefore, the finisher does not get technical and aesthetic results comparable to those obtained with a discontinuous treatment in the traditional tumble dryer with its single drum.

Whereas, SPYRA® Compact guarantees continuous realization of the results obtainable otherwise from the tumbler with a single drum, on an industrial scale, with advantages of uniform repeatability of the processes, of very unusual handle and effects such as shrinkage, wavy surfaces, voluminous surfaces and with the exclusive drape, which all enhance the use of the products applied to the fabric.



AIRO® 4: Fabrics softening drying and washing machine.

## AIRO 4

According to Biancalani, AIRO® remains the only tangible certainty for finishers at such an unusual period, one that is characterized by numerous changes. Many years after creating a new way for performing finishing, still today AIRO® maintains its characteristics as an extraordinarily versatile machine which, with the passing of time, is able to comply with changeable trends of fashion.

All this is due to the continuous technical developments of AIRO® over a period of time, Biancalani follows – and, where possible, anticipates – the technological evolution in fabrics and in finishing processes, while continuing to maintain a qualitative standard of the highest level for all the work processes carried out.

Since the first version, an entire production line has evolved in order to meet as comprehensively as possible the vast range of needs in terms of the versatile use of AIRO® (dry, wet and related chemical applications); the astonishing array of applications (men's and ladies' wear, upholstery and decorative fabrics, nonwoven fabrics); the types of fabric (woven, knitted); their composition (encompassing silk, polypropylene, linen, polyester, cotton, tencel, wool, acrylic etc.); and desired effects (drapery, peach skin, volume, elasticity, bleaching, frosty look, decolorizing, etc.).

Such variety, which is unique in the finishing machine worldwide market, offers an almost infinite number of combinations to the creative finisher, always in full respect of environmental standards, following the manufacturing philosophy that Biancalani has implemented since taking its first steps in the international market. ♦



SPYRA® Compact.