

SSM: Trend-setter that drives the global market of winding technologies and machines

The Swiss based SSM Schärer Schweiter Mettler AG is the trend-setter that drives the global market of winding technologies and machines. SSM's competencies lie in the handling of the yarn during winding and yarn processing. SSM the inventor of the electronic yarn traverse system is expected to continue its tradition by exhibiting breakthrough technologies and attractive solutions at ITMA + CITME Hall W 2, Booth B02.

Three new machines will be presented to the public for this first time at the coming ITMA Asia. Additionally SSM will also present a selected range of exhibits, which fortify its reputation for offering machines that add true value in yarn winding and processing. The machines for the following applications will be on display.

Dyeing/Rewinding

- ❖ PS6plus-W DIGICONE® preciflex™
- ❖ PW3-W DIGICONE® fastflex™
- ❖ CW8-W Classic Wind™

Singeing

- ❖ GSX3 Gas singeing random winding machine.

Winding machines

PS6plus-W DIGICONE® preciflex™

The PS6plus-W is a true high performance precision package winder for dye packages and rewinding operations. The PS6plus-W concept is for winding short staple yarns. The process costs can be cut by approx. 20% with PS6plus-W precision cones. Other significant advantages are the improved reproducibility, fewer off-shade dyeing and finally the enhanced quality and improved image as dyer.

The decisive success factor of the PS6plus-W cone winder is its thread laying by means of counter-rotating blades, which has established itself as the thread laying system that is kindest to the yarn. Further important features of the rotary motions are almost wear-and-tear-free and low-cost operation. In order to increase the speed, SSM has developed the new tensiso™, a special balloon optimizing system for supply packages. tensiso™ is a fully automated system and requires no specific manipulation by the operator. By controlling the unwinding tension the tensiso™ system offers higher winding speed, fewer yarn breaks, decreased yarn stress and so reduced hairiness as well as a significantly better yarn unwinding efficiency.

The PS6-series is the reference for cost efficiency production of dye packages. The PS6plus-W continues this tradition.

PW3-W DIGICONE® fastflex™

The new PW3-W is a manual precision package winder with a maximum mechanical speed of 1800 m/min. Besides the

fastflex™ thread laying system, the drive concept with spindle motor is another key feature of this innovative design. The space-saving integral layout (single-sided) with 6 spindles per section and the maximum machine size of 60 spindles assure rational, efficient operations in the winding department. Improved winding performance and package quality are further generated by digitens™, the technology for online tension control during winding.

The PW3-W utilizes fastflex™, the patented electronic yarn guide system that allows the production of tailor-made/customized packages forms, e.g. symmetrical and asymmetrical package shapes. Together with back pressure system the fastflex™ yarn guide device enables the production of dye packages of the most difficult filament yarns such as FDY polyester and flat filament viscose/ rayon. Further more the PW3-W fastflex™ can be used for all types of filament yarns such as silk, elastics yarns, textured or flat filament, fine technical yarns including monofilaments. The new PW3-W is the most flexible and versatile filament winding machine in the market.

New benchmark: PW3-W and CW8-W ClassicWind™

The new CW8-W is a cone to cone winding machine for the preparation of packages for weaving, warp knitting and circular knitting process. Innovative solutions, rugged technology and application of the essential allow an optimal yarn path and the simplification of the winder. The economical and robust technology cuts maintenance and service expenses down to a minimum. The CW8-W allows the adaptation of the winding to various types of staple yarns. Rotating self-cleaning tension device and dry waxing device reduce yarn friction to a minimum.

The main aspects of this new random winder are a brand new design with an optimized yarn path and winding geometry, a new sophisticated anti-pattering system, adjustable mechanical back pressure system, length measuring system and full package diameter control per spindle. The new CW8-W has been designed without a head stock; together with the 8 positions per section the machine foot print is very small. The new CW8-W offers cus-

tomers a very economical solution for the preparation of packages for weaving, warp knitting and circular knitting.

Singeing

GSX3 Gas singeing random winding machine

The GSX3 is a new singeing machine with random package winding unit. With a maximum mechanical speed of 1500 m/min and an optimized yarn path, even the finest yarn counts (single or double) can be processed to best effect.

The newest developments concerning the gas burner allow a reduction of the gas consumption of up to 30% in comparison to the previous type without any compromise to the singeing quality. The newly developed start system allows an extremely short unsigned yarn length after doffing or yarn break. Enhancements to the suction system, result in a good yarn cleaning so that in many cases the packages can go directly to the dyeing unit without having to be rewound.

The main features of the new GSX3 singeing machine are an optimized yarn path and winding geometry, a new sophisticated anti-pattering system and individual adjustable winding parameters via a central machine terminal with pictogram based touch screen display. Individual electronically controlled package length and package diameter have been implemented in the winding recipe.

Taking best ergonomics into consideration SSM engineers have developed a lifter system for simple supply exchange and thread-up after a yarn break. The perfect accessibility of key components like burners, drums or exhaust ducts rounds the picture off.

The GSX3 offers a wide application range of yarns; from the standard yarns such as cotton and rayon staple fibre yarn to the more exotic yarns such as staple silk yarn (Nm 200/2) as well as staple Aramid for technical applications (up to dtex 3500). For all those applications, the same burner is in use.

To summarize, the introduction of the new GSX3 is the perfect staple yarn singeing machine for large variety of applications. ♦