Master the Change

Using headwind as tailwind, with the KARL MAYER GROUP's solutions to ITMA, 08. – 14.06.2023, Fiera Milano, Hall 4 B119



"We cannot change the wind, but we can set the sails differently." What the Greek philosopher and polymath Aristotle recognized nearly 2,500 years ago is more true today than ever.
Our times are stormy, but with the right changes, the headwind becomes a tailwind. "Master the Change – profitable, flexible, sustainable" is the motto for a successful future, also for the KARL MAYER GROUP and its customers.
In light of the upheavals in the wake of current events, the industry leader spoke with its customers from all sectors and branches about their concerns, priorities and goals. During the discussions, five questions emerged as strategically essential and urgent. At ITMA 2023 in Milan, the KARL MAYER GROUP will be presenting solutions and innovations in response to these customer questions.

How to be profitable with increasing cost pressure?
The costs for materials, energy and transport services are exploding and are significantly reducing profits. What can I do for my profitability?, many customers are

asking themselves, and they have found what they are looking for at the KARL MAYER GROUP. The answers for warp preparation are provided above all by a compact warp sampling machine with an even smaller space requirement and, for warp knitting, by the fastest three-bar tricot machine on the market with new functionalities.
A warp knitting machine with magazine weft insertion for the production of technical textiles offers more efficiency by reducing weft yarn waste at high working width and speed.
In addition, digital solutions open up new ways to increase profitability. One example is KM.ON's Digital Production Management System for the digitization of processes, which, among other things, creates more transparency on the shop floor for the analysis and optimization of production with production-specific key figures available on a dashboard. More added value in the flat knitting sector without additional process steps is made possible by a special robotic function STOLL-knitrobotic® by integrating for example electronic components directly into the knitted textile on the ADF machine of the knitelligence® generation.



How can I keep my business running despite a skills shortage?
A glance at the KM.ON dashboard also saves a tour of the machine park and thus personnel capacities - an important plus point in view of the global shortage of skilled workers. The KARL MAYER GROUP's Care Solutions division also has fewer personnel requirements in mind. The Care X-Tend Package, for example, provides an

annual machine health check and remote service to ensure high machine availability without the need for the customer's personnel.
Constructive optimizations of the machine also ensure operation without the need for trained personnel. For example, the Spring Motion Assistant makes changing bars on HKS models child's play, and patterns can be changed via the ON pattern drive by touch screen swipe, without the need to handle pattern discs. On the warp knitting machine with magazine weft insertion, a new electronic function ensures pattern changes without mechanical handling. Optimizations on the ADF models from STOLL also accelerate the machine-setting for pattern changes in flat knitting and facilitate the handling during maintenance.
In warp preparation, batch changes on indigo and sizing machines can be considerably simplified with an innovative automation solution. In addition to less operating effort, customers benefit from less waste and potential for errors.



How do I find new business opportunities (e.g. applications) with the existing cost pressure?
In view of rising costs, customers around the world are looking for new, lucrative business opportunities. The KARL MAYER GROUP also offers them support in this respect, for example with a double bar raschel machine that uses perfected jacquard technology to implement spacer designs with an unprecedented play of colors. The colorful 3D warp knitted fabrics offer particular potential for further applications in the apparel, furniture and automotive sectors.
A warp knitted net made of biobased materials for vertical greening shows how technical textiles can be used to master our environmental challenges and at the same time open up new fields of application. The warp knitted grid structure lowers the temperature, produces oxygen and binds CO_2.

Sophisticated features for ADF models, which, among other things, enable the use of different STOLL technologies on one machine and thus more design variety, ensure new business in the flat knitting sector.
In addition, an innovative machine will be presented that combines various fabric technologies and thus completely new textile constructions.



How to manage the increasing pressure to be more sustainable?
Environmental protection and resource saving are important success factors for customers today. A tricot machine with a focus on energy management and with pattern data transfer from the cloud instead of the material- and transport-intensive use of pattern discs takes this development into account.
There are also sustainability optimizations in detail: a new function makes it possible to achieve considerable waste savings in weft yarn on the warp knitting with weft insertion, and on an ADF model from STOLL a package of targeted design changes resulted in lower energy consumption.
The denim industry is benefiting from an innovation that makes indigo dyeing twice cleaner and at the same time three times more efficient than conventional processes. This is based on the use of nitrogen (NOX) technology to control the chemical dyeing process.
Textile solutions, such as a composite made of natural fibers for boat building and a CO_2-neutral and biodegradable knitwear produced by a STOLL knitting machine, will also ensure greater sustainability. In addition, KARL MAYER will show how the production of knitted fully-fashion articles can save waste.
More sustainability and at the same time economy can also be achieved through CREATE DESIGN. The new innovative design software for flat-knitted textiles offers an interface to any 3D software and thus the possibility to create realistic 3D renders that enormously reduce the need for physical patterns and thus material consumption.

How to react to market requirements fast and flexible?

Data transfer from the cloud and ON pattern drive not only make tricot machines more productive and sustainable, but above all more flexible. Never before have pattern changes been faster, customers been able to respond more quickly to changing demand trends, and process small order quantities more efficiently.

STOLL's fully fashion production also promises multiple benefits: Fewer additional fabrication steps mean less waste and more speed in the implementation of new products.

In addition, the setup time on ADF models for pattern changes can be reduced with well thought-out constructive solutions and the design-to-market workflow in the flat knitting sector can be significantly shortened with CREATE DESIGN von KM.ON. Designers are able to simulate their designed textiles with the software at any time and become independent of the time- and resource-intensive development of physical samples.

With the various STOLL technologies such as knit and wear®, weave-in® or intarsia, the ADF machines are also true all-rounders. According to the motto "all articles on one machine", various garments will be created on one and the same ADF model in front of the eyes of ITMA visitors in Milan.