KARL MAYER

Mastering the challenges of our time with digital solutions
At ITMA ASIA + CITME, the KARL MAYER Group is focusing on digitization, 12 to 16 June 2021, Stand A 35, Hall 4 at the NECC in Shanghai

The textile industry is used to flexibility, but the Corona pandemic has once again increased the dynamics of change enormously. KARL MAYER, the innovative world market leader, has reacted quickly to the challenges of the crisis and has considerably accelerated its development activities, especially in the field of digitization. The result is digital pioneering solutions for machines, technical services and data that make textile production faster, more self-sufficient and more diverse.
More about the benefits can be seen at KARL MAYER's stand, A 35 in Hall 4 of the NECC, during ITMA ASIA + CITME in Shanghai from 12 to 16 June 2021. Here, the latest digital products, mainly offered under the KMO.ON brand, will play the main role - especially among the high-performance, high-price machines on display. The repertoire of high-tech models will be completed by a show of trendy textile developments, and will include representatives of the STOLL brand for the first time. Visitors to KARL MAYER's stand from the warp knitting, flat knitting, weaving and warp preparation sectors will thus find solutions for effective optimization, and above all for expanding their businesses. China has overcome the Corona pandemic relatively quickly. In the first three months of 2021, its economic growth grew to record levels. The boom led to lively investment activities among textile manufacturers, and the KARL MAYER Group is assisting them in this endeavor. "We want to help our customers participate in the current economic cycle. We offer them solutions that, above all, exploit the opportunities offered by digitization for highly efficient production," says Arno Gärtner, CEO of the KARL MAYER Group.
The renowned global player is looking forward to exchanging information about its innovations and market trends directly vis-a-vis with its guests, for the first time since the beginning of the pandemic and in its most important sales region. There will be further innovations and opportunities to talk during the main trade fair days at an in-house show at KARL MAYER (CHINA) in Changzhou.
Even the customers without the possibility to travel can learn more about the market-effective solutions for the current and future business. Following ITMA ASIA + CITMA, there will be a hybrid exhibition with a tour of the virtually displayed KARL MAYER exhibition stand, including a wide range of digital information materials such as videos and interviews from the live exhibition with experts.

High price-performance machines for markets with strong demand

WARP KNITTING
The HKS 3-M ON, 280", sets new standards in warp knitting in terms of output and flexibility. At 2,500 min^{-1}, the innovative HKS model is around 15% faster than its predecessor with the same working width and, thanks to the width expansion, even more productive than the narrower 210" version. Despite its high speed, the HKS 3-M ON offers the diverse patterning possibilities of the EL pattern drives. The basis is the new electromechanical guide bar control and the secure networking of the machine via the k.ey industrial computer with a cloud. From here, pattern data is loaded directly onto the machine, without production delays and handling effort. The patterning potential can be easily adapted to current market needs through different business models. Among them one variant for pattern repeats over 36 stitch courses which uses KM.ON's web-based k.innovation CORE software. The newly launched k.management dashboard from KM.ON can also be used to call up all important machine key figures independently of time and on the move. The overview creates transparency for quick decisions and efficient planning.

The digital solutions can be tried out at the HKS 3-M ON or at the KM.ON flagship store on the KARL MAYER trade fair stand. Other highlights include k.innovation STYLE for the collaborative creation of designs in cross-divisional teams and the new Paperless Solutions, which digitally document machine runs and fabric quality. The digital reports are stored securely in the cloud. This replaces paper management with often illegible data and enables fast, authorized access to values that are always up to date.

FLAT KNITTING

The STOLL flat knitting machines of the KARL MAYER Group ensure maximum efficiency and productivity in flat knitting production with the knitelligence® Industry 4.0 platform. The modular system with its software solutions ensures a high degree of automation throughout the value chain. For the creative process, the new design software k.innovation CREATE will be launched in Shanghai. For the offering, STOLL and KM.ON - two successful brands of the KARL MAYER Group - have combined their expertise and creativity to significantly simplify design development and speed up programming.
Further modules of knitelligence® are k.innovation CREATE PLUS, which combines an innovative programming system with an easy-to-learn user interface for optimum utilization of knitting potential, and a production planning system (PPS) for rational management of all processes. During the leading trade fair, three networked knitelligence® flat knitting machines will be demonstrating the performance of the platform: two ADF models and a new BMS for the commodity market.

The new BMS 52 ki impresses with the proven quality of STOLL, extremely high performance and minimal costs. Using digital solutions from knitelligence®, the newcomer will be producing individualized front parts for a children's sweater in a completely automated process during the trade show. The designs and knitting program are created with the k.innovation CREATE PLUS.

The tried-and-tested ADF family has been further improved to meet market requirements. New is the ADF 830-24 ki knit & wear in the unique gauge of E 10.2. With the high needle pitch, the model exhibited in Shanghai produces fine STOLL-knit and wear® products with intarsia, inverse plating and STOLL-ikat plating® and woven looks with STOLL-weave-in® Technology. The gauge of E 10.2 will now be available for almost all STOLL machines.
In addition, the ADF portfolio has been expanded to include a variant with a 36" working width. An ADF 330 ki will be presented in Shanghai for this purpose. This model is available as variant with 24 or 32 yarn guides and with STOLL-weave-in® device. During the trade fair, it will be producing a customizable footwear article in a multi-gauge of E9.2. The seamless knitted 3D shoe upper is optimally prepared for a low-confection downstream process in footwear production.

WARP PREPARATION

In the warp preparation weaving sector, the ISODIRECT presents itself as an efficient beam warping machine for the mid-range segment with an excellent price/performance ratio. The innovative model processes all spun yarns, reaches a warping speed of up to 1,000 m/min and can be operated with simple hand movements. The beams produced are absolutely cylindrical in design, precisely wound and completely identical in terms of warp lengths. A computer-controlled measuring system allows deviations of only 0.15% maximum. With the high-quality ISODIRECT beams, the machines in the weaving mill can fully develop their efficiency potential.

CARE SOLUTIONS - After sales of the digital generation for maximum competitiveness

In the Care Solutions sector, KARL MAYER is using the possibilities offered by digitization to provide after-sales support at a completely new level.
A newly developed dashboard now makes it possible to book and use support services individually in the simplest way, in a targeted manner, and without any ambiguous communication.

Support from experts, tools for spare parts management and online service offers can be used. Specific products of the Care Solutions dashboard for this are the proven WEBSHOP for easy spare parts ordering, a health check for inspecting the machine, as well as online after-sales tools for immediate troubleshooting of the machine remotely and for expert support. There is also a button to access videos that provide machine and technological know-how. Assistance videos and e-learnings will follow in this area.
A prerequisite for utilizing the clear customer benefits from the diverse offers is the networking of the machines via k.ey.

Textile solutions for the trends of our time

CHIC KNITTED GOODS WITH FUNCTION AND SUSTAINABILITY

For comfortable fashion and loungewear, KARL MAYER presents trendy textile patterns and chic garments with important product attributes of our time: smart, casual and environmentally friendly.
For more sustainability, recycled PES and PA yarns can be processed on all KARL MAYER's current machines, without compromising on speed and product quality. In addition, warp knitting can do without sizing. With less water, chemicals and energy than generally used in weaving, woven-fabric-like articles can be produced, as demonstrated by a chic denim-style dress. The textile for this was created on a WEFT.FASHION TM 3 and consists of 73% yarn-dyed, coarse natural fiber flame yarn.
Fine woven-fabric-like materials, e.g. for men's shirts, can also be produced on warp knitting machines. One example is a lightweight article completely made from polyester for full recycling, which offers natural comfort-stretch, breathability and wear without wrinkling.
Less waste and more comfort is also the goal of close-to-contour manufacturing. What is possible in this regard is demonstrated by a sporty fully fashion top from a RDPJ 6/2 EL that was made with seamless technology and free-cut fabrication, thus managing without seams.
TERRY.ECO, the highly productive and sustainable production of terry products, also has something new to offer. For the first time, a super-soft terry article made of absorbent bamboo fibers on the inside and ultra-soft microfiber polyester on the outside has been processed on a TM 4-TS EL to create a casual loungewear.
The textile show is rounded off by trendy lace fashion and by new, innovative 3D crinkle articles. The fabrics produced on a HKS 4-M EL were created using a yarn mix of polyamide and only partially drawn-in wrapping yarn.

Eye-catchers for guests from the flat knitting sector are likely to be the extravagant fashion items from the current STOLL collection "FASTER: From(CONCEPT)–To(STORE ". In addition, a joint project for the production of sustainable mouth-nose masks will be presented.

SUSTAINABLE PRODUCTION OF WOVEN FABRICS IN INDIGO BLUE WITH GREENDYE

In the denim sector, a collection of trendy jeans articles demonstrates the performance of KARL MAYER's environmentally friendly nitrogen technology for indigo dyeing. The dye content of the deep blue GREENDYE textiles is 1.5 to 2.7%. To achieve it, the cotton raw material went through three dye troughs instead of the usual six. This saves liquor volume and thus water or wastewater and chemicals. In addition, less yarn waste is produced, and the dye is better fixed.

WELL ON THE WAY WITH KNITTED GEOTEXTILES AND CONSTRUCTION TEXTILES

The exhibits of KARL MAYER Technische Textilien at ITMA ASIA + CITME will focus on infrastructure and construction. In particular, the wide range of articles for the renovation of pipes, the implementation of roofing systems, the reinforcement of roadways and for use as plaster grids are proving to be bestsellers in China. KARL MAYER Technische Textilien is also looking forward to many discussions about the new BIAXTRONIC® II. This warp knitting

machine with weft insertion has been optimized in terms of its price/performance ratio, and has already successfully been presented to key customers in the run-up to the fair.