

Quantum leaps in patterning

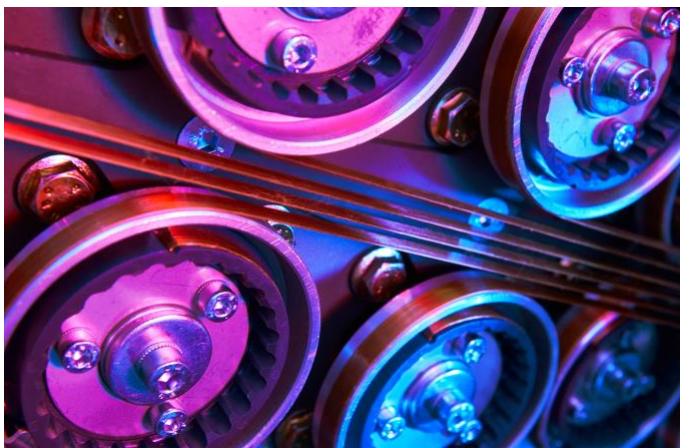
KARL MAYER's pattern drive solutions have been setting standards since day dot

Warp knitting technology enables fabrics with a wide variety of designs that are suitable for the most diverse applications to be manufactured highly productively. KARL MAYER's warp knitting machines have been showing what's possible for decades now.

Particularly when it comes to controlling guide bars – one of the most important patterning components – the world market leader has traditionally been a developmental pioneer. KARL MAYER brought computer technology into the world of lace raschel machines with its electromechanical SU drive, and later, with the string bar system, it opened up the advantages of single-motor drives for lace patterning. Thanks to the latest innovations – the ON gear combined with digital solutions from KM.ON – both tricot and raschel machines can be digitalised.

Patterning in a digital age

The HKS 3-M ON is one of the first warp knitting machines connected to the digital world of KARL MAYER. This innovative newcomer is networked with KM.ON's secure cloud via KM.ON's k.ey and works with the newly developed ON gear. The HKS 3-M ON thus combines the respective advantages of N and EL gears: simple, fast design changes with high working speeds. Patterning is highly flexible since the information for the guide bar movement is loaded directly onto the machine from the KM.ON cloud. The product design options allow customers to quickly and easily adapt their current market requirements using a new multi-model concept. With the SwapKnit 36 and SwapKnit 36 Flat models, patterns with repeats of up to 36 stitch courses per main shaft revolution are possible. The required lapping information for new or tried-and-tested articles are obtained from KARL MAYER's SPARE PARTS WEBSHOP in just a few clicks, in the sense of the electronic pattern disc, and loaded onto the machine. The acquired lapping patterns remain available to customers in the cloud and can be used successively on several machines. For designs with over 36 stitch courses per main shaft revolution, a model has been developed that uses KM.ON's k.innovation – CORE. The web-based software makes uncomplicated pattern creation possible. Simply log in to k.innovation – CORE from any internet-ready device, select a machine, enter the lapping patterns for the individual ground guide bars and subsequently create the pattern file and send it to the KM.ON cloud in just a few clicks. All that remains before production can get underway is to select the lapping pattern file on the machine's operator interface. What's more, k.innovation – CORE offers collaboration possibilities for faster development processes. Authorised external parties can therefore jointly review and edit designs without needing to send documents reciprocally, which can often be a cumbersome process.



Servo motors as components of the string bar system



The HKS 3-M ON

Tailored to market needs

Patterning models can be used by customers with different business concepts, depending on their requirements. For SwapKnit 36, they can buy individual lapping patterns. For SwapKnit 36 Flat and k.innovation – CORE, a licence can be purchased to cover a certain period of time. For k.innovation - CORE, licences are valid for either 3 or 12 months. During this period, the customer can use the software flexibly to create patterns. The lapping patterns ordered are available immediately in all variants and enable lapping changes without posing any modification risks, yet with only minimal downtimes and at maximum speed. Customers can respond to market requirements within the shortest possible time and highly efficiently. Using the acquired virtual pattern rack or a specially created collection of pattern files, customers also no longer have to store pattern discs.