

Precision and speed



**Double lock chainstitch
multi-needle sewing
machine Mammut VMK**



Quality which has proven its worth - for decades

In the beginning of the seventies, a Mammut double lock chain-stitch multi-needle sewing machine revolutionized the large series production of mattress panels and borders with an effi-

ciency unheard of until then. And today too, the new Mammut VMK is the undisputed world champion in production. But requirements are still ever-increasing. New challenges are, for example, the ex-

tended variety of applications demanded - key words are: quilts, bed spreads, stretch, terry cloth - or fullest utilization even with very small series. The Mammut VMK leads in these areas as well.



Five features characterize our proven and trend-setting concept.

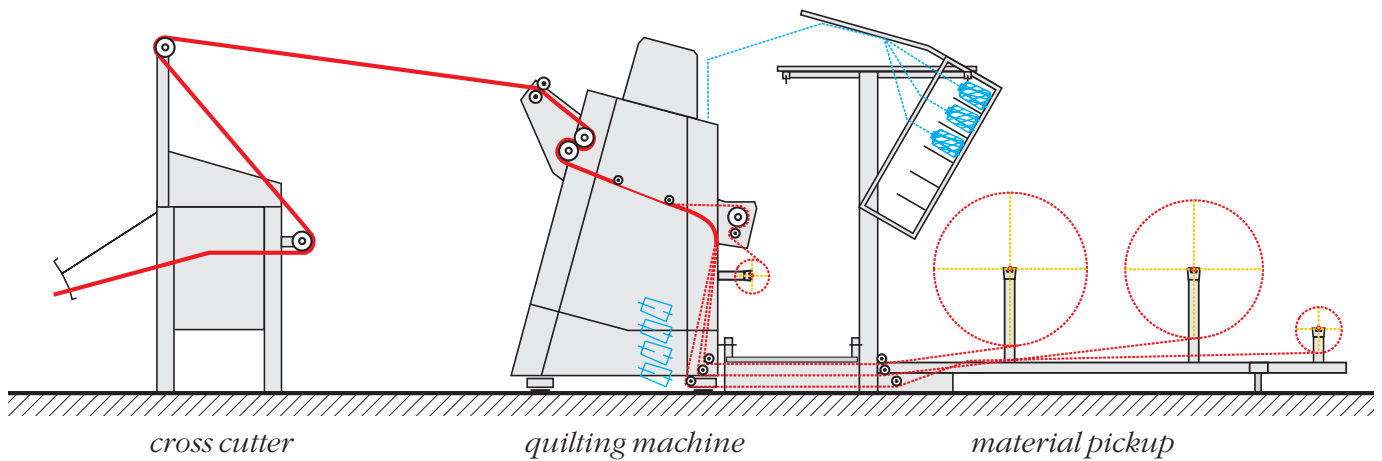
1. The robust design guarantees the lowest susceptibility to machine failure, even under the most demanding operating conditions - for years and beyond!
2. Numerous detailed solutions in handling and highly developed computer technology (VMK CNC) permit efficient operation with little material waste, even with small series production.
3. The perfected sewing system in conjunction with the well synchronized material transport permit high sewing speeds for the widest variety of fabrics and patterns.

4. The fast moving components of the machine are built without bushings or springs. In conjunction with lifetime lubricated ball bearings, make the lubrication time required for conventional machines practically obsolete - that's time saved in which the Mammut VMK is busy producing!
5. Sewing precision, seam quality and accurate quilting are the core requirements for any quilting machine. These are the core areas our designers focus their competence in. In this brochure we would like to present how this is embodied in the Mammut VMK. Judge for yourself.

An outline of the advantages of the Mammut VMK:

- wide variety of patterns
- robust design
- multiplicity of applications
- high productivity
- low maintenance
- high stability of value

The Mammut VMK is available with two different control systems: Either the VMK E with electronic cam control for standard patterns or the VMK CNC with computer control for superior patterns.



Technical data	VMK 3 250 E	VMK 3 330 E	VMK 3 250 CNC	VMK 3 330 CNC
max. material width	2.700 mm	3.300 mm	2.700 mm	3.300 mm
max. stitching width	2.700 mm	3.300 mm	2.700 mm	3.300 mm
max. distance between exterior needles	2.375 mm	3.175 mm	2.375 mm	3.175 mm
min. distance between needles	25 mm	25 mm	25 mm	25 mm
max. lateral pass	150 mm	150 mm	360 mm	360 mm
3 needle bars, distance	75/150 mm	75/150 mm	75/150 mm	75/150 mm
max. sewing speed	1.200 St/min.	1.000 St/min.	1.400 St/min.	1.200 St/min.

In detail - Mammut stitching technology

For example the automatic sliding hook

High speed sewing and low wear and tear are only possible using a transport system with continuous feed. However, one disadvantage in terms of sewing is

Mammut positions the hook exactly towards the upper thread loop corresponding to the needle diversion. In this way the diversion is compensated for

is not required. Thanks to this feature, the use of thinner needles (110 size) is made possible where previously only thicker needles could

Fig. 1

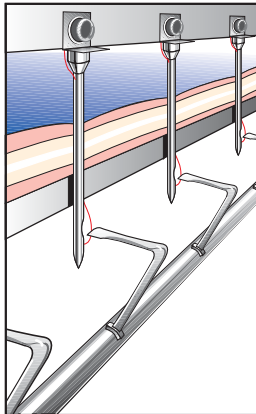


Fig. 2

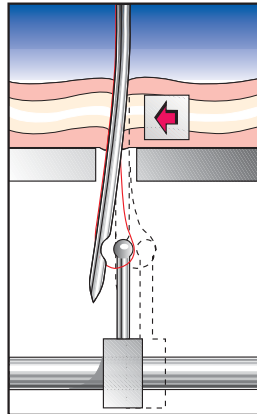


Fig. 3

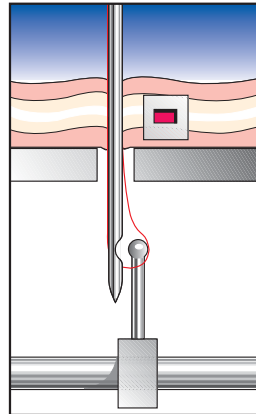
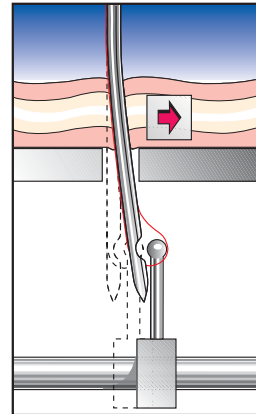


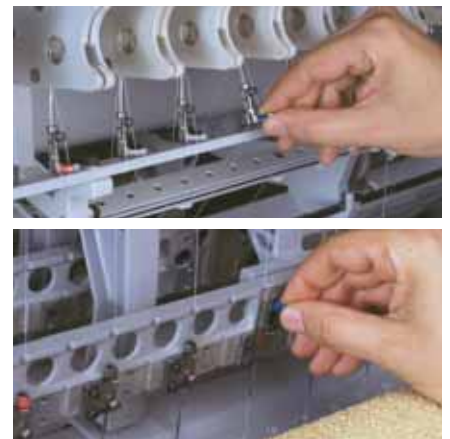
Fig. 4



have been employed. An ideal prerequisite for sewing delicate fabrics such as elastics and tricot without damaging them.

associated with this: as soon as the needle is inserted into the fabric, it is deflected in the direction of sewing. In the case of high lateral pull this can lead to slip stitches. Our solution: the automatic sliding hook. Equipped with this unique feature, the

(figures 2-4). Thus, a high degree of sewing precision and seam quality is achieved with the use of the automatic sliding hook. Consequently, a wear and tear intensive step transport system with its associated limited performance capacity



Advantages of Mammut sewing technology

- Active sewing precision and high seam quality
- gentle processing, even with delicate fabrics
- high degree of flexibility and short set up time

For example the fast replacement of needles and loopers

A simple latch mechanism positions the needle as well as the looper exactly and with one grip. Each individual needle and individual looper is assigned to one individual park position so that the respective needle and looper position can be activated or deactivated very quickly. The thread remains threaded.



Advantages of Mammut sewing technology

- precise sewing of difficult contours
- thick and thin fabrics are easily processed (samples on request)
- efficient single motif repeat quilting (optional)

For example – the ultimate ticking infeed attachment*

Two different, yet important, requirements exist for the handling of the ticking. On one hand, a new roll of ticking should be placed quickly and without much handling. On the other hand the ticking should always feed in to the machine aligned and under constant tension. For these reasons we have developed a powered roller through, which guarantees constant tension on the ticking as well as synchronized movement of ticking with the sewing operation

* optional



For example – individually programmable needles*

As a desire for a more varied selection of patterns is demanded, subsequently the need for thread cutters has become very important. In contrast to the conventional continuous type patterns, it is now possible to produce patterns which are interrupted or closed in itself: circles, diamond, short seams etc. with the use of a thread cutter. The MAMMUT VMK takes this a step further: each needle can now be individually programmed and used to create a wide variety of patterns which makes the distinction between multi needle quilting and single needle quilting fluid. Logos and trademarks can be included and by omitting or adding individual seams, unique impressions can be created.

* optional



For example the adjustable presser foot

The material-specific pressing of the fabric is an important factor in sewing precision. This is why the presser foot can be adjusted in seconds according to the respective thickness of the fabric being sewn - even during operation. This means high profitability even with frequently varying filling weights.

User friendly - Mammut electronic technology



CNC control

is the key to automated quilting offering an open choice of the number of patterns contained in a pool out of which the desired pattern can be quickly and easily selected and quilted. The electronic and mechanical components used are in accordance with tested and proven industrial standards.

The facts:

- windows user surface
- clear monitor screen layout
- touch screen operation
- split-second pattern selection
- graphic representation of patterns to be selected
- graphic representation of the selected pattern with corresponding needle configuration
- simple pattern correction to correspond to different types of fabrics
- tacking selection
- length of stitch is modifiable during operation
- large display of remaining time for current job
- large pictograms to depict operation mode at a glance

- integrated cross cutter control (cross cutter optional)
- electronic monitoring of motors
- error messages in plain language
- modular design to correct errors

Programming

of the quilting pattern is performed either on an external standard-PC or directly on the quilting machine. A digitizer may be used. The software is user-friendly and programs can be quickly and easily written.

The facts:

- Programming of straight stitch runs by entering the beginning and end points, of arcs and circles by entering any additional point on the circle section
- automatic duplication of diamond and circular patterns as well as short and longitudinal seams
- automatic programmable wave patterns with selectable amplitude
- choice of stitch length and sort of tacking
- pattern generation from sub-patterns with the options turn, mirror, enlarge, reduce
- fast and simple correction or modification of already existing quilting patterns (edit function)
- graphic representation of pattern during programming
- programming possible during operation

The development of quilting patterns is limitless thanks to Mammut electronic technology. Practically any pattern can simply be programmed and varied. The best prerequisite to quilt according to market demands. On the following page some examples of patterns.





border quilting

elastic fabric

Customer Service - We're there for you!



Due to our consistent Research and Development, Mammut is known worldwide for our high quality industrial quilting. We pride ourselves on providing well-designed technology of the highest quality. Our machines are durable and easy to maintain. We check each machine in detail, before it leaves our premises, to ensure that it complies exactly with our high standards. However if you do happen to need our help we will be there for you.

We provide expert advice, speedy delivery of replacement parts and on-site repairs and maintenance - all from a central and easily-accessible location.



STUTZNÄCKER
STEPSYSTEME
NÄHMASCHINEN-FABRIK
EMIL STUTZNÄCKER GMBH + CO. KG
Max-Planck-Straße 3 · D-50858 Cologne
Tel: 02234 · 218-0
Fax: 02234 · 218-288
Internet: <http://www.mammut.de>
e-mail: info@mammut.de



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