

# OVJA 1.6 EM

High-productivity jacquard electronics –  
with the special machine for mattress covers.



Created in Albstadt. Made in Germany!



*Always in fashion –  
Quality!*  
**Mayer & Cie.**  
Circular Knitting Machines



# OVJA 1.6 EM

**Flexible mattresses with good point elasticity need highly elastic covers.**

Because of their two-way elasticity, circular knitted fabrics provide the optimum degree of support for modern mattresses. Their high productivity makes fully electronic circular knitting machines from Mayer & Cie. ideal for the manufacture of this type of cover fabric. Electronic needle selection allows quilting patterns to be knitted simultaneously in a single work step.

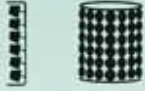










**Bestseller OVJA 1.6 E becomes the OVJA 1.6 EM with 30% increase in output.**

Mayer & Cie. has been working on a further development of the tried and tested OVJA 1.6 E to address the very specific needs of mattress cover fabric manufacture. The result: The new OVJA 1.6 EM. This new development is setting whole new productivity and economy standards, working at speeds of 24 rpm with 38" in continuous operation (compared to 18 rpm for the OVJA 1.6 E with high-speed kit). This corresponds to a production increase of 30% - coupled with optimum knitting quality and outstanding reliability. The new model also features the same operating simplicity and reliability. The OVJA 1.6 EM is capable of knitting colour and relief jacquard with minimal set-up times due to electronic pattern resetting.

<b>Cylinder diameter</b>	38"	42"
<b>Machine gauges</b>	E 18, E 20	
<b>No. of Feeders</b>	60	68
<b>Speed up to</b>	1.2 m/s 24 rpm at 38"	
<b>Minimum space requirement appr.</b>	30 m <sup>2</sup>	37 m <sup>2</sup>
<b>Weight appr.</b>	3.800 kg	4.000 kg



# Specifications and facts:

STANDARD		OPTION	
	<b>Creel</b>		<b>Creel</b> <ul style="list-style-type: none"> <li>● VARI-creel</li> <li>● VARI-creel with aluminium tubes</li> <li>● VARI-circular creel with aluminium tubes</li> </ul>
	<b>Yarn feeding</b> <ul style="list-style-type: none"> <li>● 1 ring</li> </ul>		<b>Yarn feeding</b> <ul style="list-style-type: none"> <li>● MPF 30</li> <li>● lay-in yarn guide</li> <li>● jacquard feeding units</li> </ul>
	<b>Needles/Sinkers</b> <ul style="list-style-type: none"> <li>● 2 types of dial needles (central stitch length butt)</li> <li>● 1 type of cylinder needles (with security butt) / control sinkers</li> <li>● 1 selection magnet per feeder for electronically controlled individual needle selection</li> <li>● approx. 6,5 mm delayed timing (adjustable, gauge indication)</li> </ul>		<b>Needles/Sinkers</b>
	<b>Cam parts</b> <ul style="list-style-type: none"> <li>● cam segments made of perunal</li> <li>● dial: exchange cams for miss – knit</li> <li>● cylinder 1 track</li> <li>● cylinder: exchange cams for miss – knit</li> <li>● exchange cams for support</li> </ul>		<b>Cam parts</b> <ul style="list-style-type: none"> <li>● 2nd stitch length area</li> <li>● exchange cams</li> </ul>
	<b>Frame</b> <ul style="list-style-type: none"> <li>● portal frame for 520 mm fabric rolls</li> <li>● 42" temperature control from gg 20</li> <li>● two-step platform for 42"</li> </ul>		<b>Frame</b> <ul style="list-style-type: none"> <li>● portal frame for 920 mm fabric rolls</li> <li>● industrial open width frame</li> <li>● sliding platform</li> <li>● open-width frames</li> <li>● steps for the open-width frame</li> </ul>
	<b>Drive/Electric</b> <ul style="list-style-type: none"> <li>● frequency controlled drive (AC)</li> <li>● 400 V, 50/60 Hz; 5,5 KW (38" – 42")</li> <li>● 4 KW peripheral units</li> <li>● machine controller with color-display and USB-Port</li> <li>● control voltage 24 V</li> </ul>		<b>Drive/Electric</b> <ul style="list-style-type: none"> <li>● power transformer</li> <li>● fabric light in the side legs</li> </ul>
	<b>Take-down</b> <ul style="list-style-type: none"> <li>● adjustable take-down with positive drive</li> <li>● rubber covered rollers</li> <li>● MCT trapezoid spreader</li> </ul>		<b>Take-down</b> <ul style="list-style-type: none"> <li>● fabric cutting device</li> <li>● 3 roller fabric take-down winder (steel rollers)</li> </ul>
	<b>Control</b> <ul style="list-style-type: none"> <li>● SENSO P pressure oiler (oil: VG 22, VI 110± 20)</li> <li>● 3-shift counter</li> <li>● working hour counter</li> <li>● central control for oiler, counter and peripheral accessories</li> <li>● stationary and rotating lintblower (air: min. 6 bar, 250 l/min.)</li> <li>● peripheral equipment control by display</li> <li>● VG 3</li> </ul>		<b>Control</b> <ul style="list-style-type: none"> <li>● 4/5-shift-counter</li> <li>● flutter blower</li> </ul>
	<b>Miscellaneous</b> <ul style="list-style-type: none"> <li>● needle detectors</li> <li>● electr. supervision system with display (e.g. yarn feeding syst., oiler safety guards and pneumatic unit)</li> <li>● battery in case of power failure</li> </ul>		<b>Miscellaneous</b> <ul style="list-style-type: none"> <li>● MSD1 (Mayer Design Software)</li> <li>● rapport and striper-software</li> <li>● Interface for MDA</li> <li>● gauge/magnet fixing</li> <li>● Intus for MER and positive feeding units</li> <li>● MDA.web software for machine data acquisition</li> </ul>

\*on request

Subject to design changes in the interest of technical progress. Illustrations may depict accessories which are not included in the standard machine equipment.



## Fast, economical production of what the market wants.

Tried and tested MCT full electronics with individual needle selection in the cylinder cam opens up new creative scope. In conjunction with MDS 1 pattern preparation with the familiar Windows user interface, every pattern is transferred to the machine in a matter of seconds. Together with 3 positions in the dial cam, this makes for unique patterning variety, fast and easy resetting and high output. The efficient way to knit even the smallest quantities.



## Economical mattress cover production.

A number of major adjustments and further development work were carried out to ensure controlled processes at the extreme speed of 24 rpm with a 38" diameter. The electronic individual needle selection with one magnet per feeder was modified. The design of the selection cam together with special control sinkers was adjusted in line with the increased output. The newly developed precision stitch forming system permits even more exact stitch length adjustment, while the new yarn feeders make for extended flexibility and guarantee precise, reliable top-quality production. The individual electronic needle selection system has been further advanced to cope easily with the new high speeds, even in continuous operation.

## Exclusively from Mayer & Cie. – cam segments made of Perunal.

Perunal is a high-tech material derived from the world of aerospace engineering. It is characterized by outstanding dimensional stability at different temperatures, so enhancing knitting quality and reducing wear. Other benefits: Perunal does not oxidise, is substantially harder and permits improved dissipation of heat.

## High performance in both quality and output – also with open-width

With the increasing use of modern synthetic fabrics and elastomer plating, open-width technology is gaining in importance. Mayer & Cie. open-width devices are designed to match the stringent technical, quality and performance standards of the circular knitting machines. MCT open-width take-down systems achieve up to 40 rpm in continuous operation both in the mechanical and the electronic version.

With the utmost reliability. This type of high-speed open-width technology calls for a highly stable frame construction. New drive systems, special inverters, internally developed and modified MCT software, a speed-controlled braking system and suitably designed take-down bearings are just some of the reasons for the ground-breaking new standards set by Mayer & Cie. open-width devices.

The open-width frame is also optionally available with sliding doors for reduced space requirement.



## Fully electronic MCT control – simple, reliable, reproducible.

The electronic individual needle selection from Mayer & Cie. – tried and tested thousands of times over – operates with absolute reliability using only one magnet per feeder, and guarantees extremely simple handling. This facility turns costly resetting time into profitable production time while reducing staffing costs.



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