

Universal warping machines

MW700 + MW1000

For the warping of elastic and non-elastic
yarns on warp bobbins and beams



MW700 + MW1000

Machine concept

The MW700 and MW1000 warping machines not only answer the special demands made by highly elastic yarns (latex, synthetic elastomers and single- or double-covered rubber threads, but also those of light elastic and non-elastic threads, whereby constant thread tension is achieved from the core to the periphery of the warp beam. The machines are ideal for non-elastic yarns in the fine to medium yarn count range up to 3000 dtex and at approximately 100 dtex, the minimum thread number stands at 25. During the processing of elastic yarns, the warping machine is fitted with a positive drive roll-off creel and a preliminary drafter, which is located outside the warping machine.

Control and drive system

Thanks to the touch screen machine controls, which makes the entry, storage and reproduction of process parameters still more user-friendly, the retrofitting of subsequently purchased additional units is now no longer a problem. Depending on customer requirements, the machines can be designed with anything from frequency-controlled, three-phase a.c. drives to highly dynamic servo-drives.

The warping and take-off speeds, as well as the percentage speed increase of the pre-drafter can be defined in the controls in a user-friendly manner, saved as a recipe and then called up when needed.

Advantages for the warping process

- Very high motor torque and thread tension
- Extremely high motor running torque even in the case of large beam diameters
- High-precision, synchronisation during constant running, start-up and braking
- Very short stopping times in the case of thread breakages (prevents broken thread ends from running onto the warp beam) as a result of the switching of the drive motors to generative operation and thus the use of all the kinetic energy as braking power

Standard features

- Siemens S7 control system
- Powered lifting and lower device for the loading of the warp beam at ground level with adjustable end positions in line with warp beam dimensions
- Powered setting of the thrust bearing for the rapid adjustment to differing warp beam widths
- Pneumatic warp beam ejection
- Expanding reed with a laying device with 9 segments in a zigzag pattern in the MW700 and 11 in the case of the MW1000
- Adjustable reed changing device with a stroke of up to 30 mm
- Leasing device
- High-definition metre measurement with shift or day counter
- Programmable warping speed graduation in line with beam start-up
- Safety devices with safety protection switch

Optional features

- Thread tension control device with negatively driven evener rollers for non-elastic yarns
- Preliminary drafter for elastic yarns
- Width-adjustable contact device for constant pressure during warping; adjustments can be made during warping
- Antistatic device with 2 rods
- Wax or oil device
- Remote control
- Warping machine mounted on rollers
- Load measurement beam for the detection and regulation of thread tension

Technical data for the MW700U

	Warping of non-elastic threads	Warping of elastic threads
Max. flange diameter	600 mm	600 mm
Max. warp beam width	700 mm	700 mm
Max. warping speed	800 m/min	450 m/min
Compressed air unit	6 bar	6 bar
Compressed air consumption	5 lt /min	5 lt/min
Installed power	11 kW	Warping machine 11 kW Preliminary drafter 11kW / 11 KW Roll-off creel 7/14 kW oder 11/22kW
Thread tension moment	150 Nm / 155 Nm (option)	150 Nm / 155 Nm
Max. warping machine start-up and braking torque	150 Nm / 377 Nm (option)	150 Nm / 377 Nm

Preliminary drafter for elastic yarns

The electronically adjustable preliminary drafter is used to maintain constant thread tension between the warping machine and the positive roll-off creel in every movement phase. Two different drafts are programmed:

- Between the warping machine and the unwinding creel
- Between the preliminary drafter and the unwinding creel

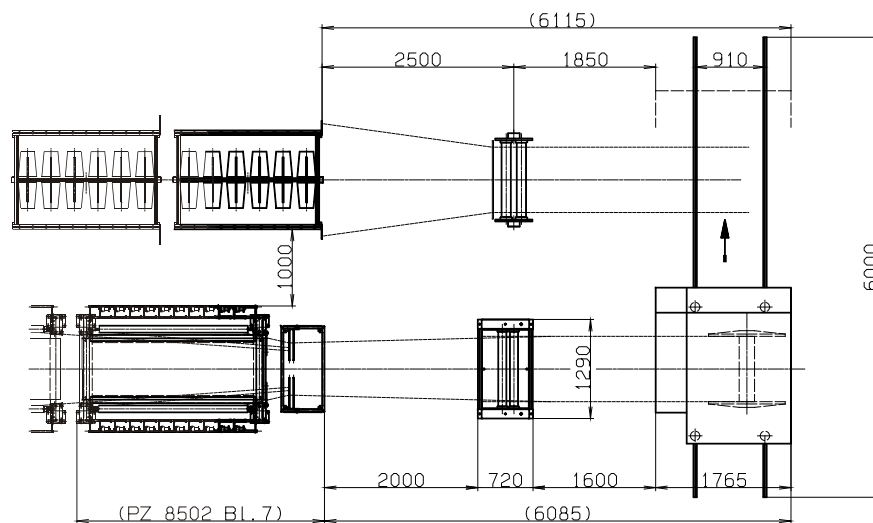
The rollers of the preliminary drafter are powered by a servomotor, which runs synchronously with the warping machine. The thread draft is maintained at a uniform level in every operating mode (acceleration, braking, emergency stop) and is entered directly via touch screen on the warping machine.



Preliminary drafter

Machine mounted on rollers

This option allows the transfer of the warping machine from one creel to another, thus permitting the coverage of both fields of application, i.e. the warping of elastic and non-elastic threads.



Roller-mounted warping machine for the alternating warping of non-elastic and elastic threads:

Technical data for the MW1000

	Warping of non-elastic threads	Warping of elastic threads
Max. flange diameter	1000 mm	1000 mm
Max. warp beam width	1000 mm	1000 mm
Max. warping speed	800 m/min	450 m/min
Compressed air unit	6 bar	6 bar
Compressed air consumption	5 lt /min	5 lt/min
Installed power	42 kW	Warping machine 42 kW Preliminary drafter 11 kW Roll-off creel 22kW
Thread tension moment	783 Nm	783 Nm
Max. warping machine start-up and braking torque	1975 Nm	1975 Nm

The Jakob Müller Group

Müller researches, develops, engineers and manufactures top technology – from individual subsystems to entire system solutions, including program-

ming, warping, weaving, knitting, dyeing, finishing and making-up of narrow fabrics, webbings, labels and knitted goods.

Application areas

- Clothing
- Underwear
- Sports/leisure wear
- Footwear
- Furniture/household textiles
- Medicine
- Transport
- Conveyors and drives
- Electronics
- Building electronics
- Field technology

Narrow fabric weaving and make-up

- Product range for producing all narrow fabrics
- Complete machine range for warp patterning with dobby or jacquard shedding
- All-embracing system solutions:
 - warping
 - pattern creation
 - narrow-fabric weaving
 - dyeing and finishing
 - photo-optics quality inspection
 - winding, spooling, rolling and layering narrow fabrics
- Making-up narrow technical textiles

Narrow-fabric warp knitting with weft insertion

- Complete machine range for:
 - knitted goods from very simple to extremely complex designs
 - virtually unlimited repeat lengths
- Patterning versatility and unexcelled flexibility
 - proven Müller compound needle
 - technology for runproof products
- Top output capacities:
 - greater knitting width
 - top running speeds

Label weaving

- Complete system solutions developed specially for label production:
 - pattern creation
 - label sampling
 - label weaving
 - label cutting and folding
- Systems for labels with woven or cut edges
- Machines with highest speeds and minimum space requirement (needle, rapier and air technology)
- Product range to satisfy all qualitative and quantitative requirements

Your benefits as Müller customer

- Technology from one source where the emphasis has been on nothing else than narrow fabric manufacturing equipment for more than 110 years.
- Collaboration with a supplier employing over 1000 people exclusively in the production of tape and narrow fabric machinery.
- System solutions for your entire production – all from one source, one partner.
- Machines of robust, compact design, engineered to embody the latest technological advances.
- Low-maintenance systems with long life and good resale value.
- Worldwide sales and service network with more than 70 bases. We are always close to you.
- The Jakob Müller Institute of Narrow Fabrics is a centre for basic and advanced training, disseminating sound know-how on Müller products, as well as the design and production of textile products and industrial management.

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