



HEAVY DUTY TEXTILE MACHINERY



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Rep.:



Via Pelizza da Volpedo, 79/81
20092 Cinisello Balsamo Milano Italy
P +39 02 66049440
www.metag.it info@metag.it



 Designed,
Engineered and
Manufactured in Italy

THE COMPANY

METAG company has decades of experience in the design and construction of looms for heavy webbings and technical textiles. Metag machinery and accessories are completely engineered, developed, and manufactured at our factory in Milan-Italy. Control of the engineering and manufacturing process enables us to develop looms to meet our client's demanding manufacturing goals.

Metag weaving machines are built for weaving rigid and elastic fabric, multi-ply high density webs in most yarns, including synthetic and natural fibers as well as ceramic, glass, carbon-fiber, and aramid.

MACHINES AVAILABLE IN THREE DIFFERENT SERIES:

- TML with latch-needle edge binding, for the higher speed production of medium-heavy webs.
- TRX with bobbin edge binding for heavy and special webs.
- TRXA with latch-needle edge binding, also for heavy and special webs.



THE SERIES

TML SERIES

The TML Series strikes the right balance between the heavy-duty capacity of the TRXA series and higher weaving speeds. The TML's latch-needle edge binding, cam-driven warp control and high-speed operation is designed for medium-heavy fabrics such as sling-webs, tie-downs, military belts, and conveyor belting, rigid or elastic.

TRX SERIES

The TRX Series is suitable for heavy multi-ply webs, designed for the use of any style of yarns.

TRX series is executed with bobbin stitch edge-binding. The high-capacity bobbin spool allows long runs between bobbin changing.

Bobbin stitch yarn is controlled through several tension units to ensure perfect edge binding and a photoelectric cell monitors the amount of yarn remaining, stopping the machine before it runs out.

TRXA SERIES

The TRXA Series comes with the same heavy-duty frameset of the TRX but provides with a latch-needle edge binding for continuous operation without bobbin changes and generally higher weaving speeds.

TRX and TRXA series are available, upon request, equipped with the newest generation of STAUBLI® rotary electronic dobby S-3000 increasing the productivity and flexibility of the loom through quick style changes and infinite pick repeats. Machines equipped with the electronic dobby can accommodate up to 20 harness frames.



PRINCIPAL AND STANDARD FEATURES

- Dual style of selvedge binding available: bobbin (TRX) or latch-needle (TRXA and TML)
- Clear open shed, even with the high density spun staple yarns
- Powerful reed-drive for heavy beat-ups
- Heavy duty double take-down unit, with large diameter deep knurled rollers
- Robust harness frame, possibility to regulate in height positioning
- Longer shedding levers for a higher lift
- Mechanical cam-box with cam-driven shedding motion
- Main frame in a combination of heavy-grade steel for stability and strength
- Weft feed accumulators, self-adjusting and electronically controlled suitable for all yarns
- Wide warp deflector leasing bars with great lease combination and possibilities
- Embedded LCD for machine controlling and functions adjusting
- Heavy duty motor controlled by electronic inverter for speed adjustments settings
- Crawl motor (jog) facility
- Robust and simple construction, enhanced solidity, and compactness
- Low vibrations and low noise level
- High precision engineered components made in Italy
- Limited preventative maintenance (P.M.) requirement

OPTIONS AVAILABLE

- Electronic dobby machine (only for TRX and TRXA series)
- Jacquard machine
- Electronic take-off motion
- Weft selector
- Rubber feeder, positive
- Warp yarns tensioner frame
- Automatic bobbin winder (only for TRX series)
- Fabric winder (block or spool)
- Beams stand with positive feeding
- Special projects in accordance with the Customer request



LIST OF MACHINES

BOBBIN SELVEDGE BINDING

	SELVEDGE BINGING	SPACES	REED WIDTH (mm)	SHAFTS (max)	SHED FORMATION	PICK REPEAT	MOTOR POWER (kw)	PICK DENSITY (min-max)	WEAVING SPEED	WEFT FEED	CATCH THREAD FEED	DIMENSION (cm)	WEIGHT (kg)
TRX 160	bobbin	2	160	14	positive cams	1:6 - 1:8	3	2-40	250 ¹	electronic	/	225x130x145 ²	1300
TRX 160-E	bobbin	2	160	20	electronic dobby	endless	3	2-40	300 ¹	electronic	/	225x160x145 ²	1500
TRX 320	bobbin	1	330	14	positive cams	1:6 - 1:8	3	2-40	200 ¹	electronic	/	225x120x145 ²	1300
TRX 320-E	bobbin	1	330	20	electronic dobby	endless	3	2-40	200 ¹	electronic	/	225x160x145 ²	1500
TRX 600-E	bobbin	1	620	16	electronic dobby	endless	5.5	2-40	130 ¹	electronic	/	225x290x145 ²	1800

LATCH NEEDLE SELVEDGE BINDING

	SELVEDGE BINGING	SPACES	REED WIDTH (mm)	SHAFTS (max)	SHED FORMATION	PICK REPEAT	MOTOR POWER (kw)	PICK DENSITY (min-max)	WEAVING SPEED	WEFT FEED	CATCH THREAD FEED	DIMENSION (cm)	WEIGHT (kg)
TML 130	latch needle	2	130 ³	14	negative cams return by springs	1:6 - 1:8	2.2	2-40	700 ¹	electronic	positive	170x130x160 ²	800
TML 230	latch needle	1	230 ³	12	negative cams return by springs	1:6 - 1:8	2.2	2-40	500 ¹	electronic	positive	170x110x160 ²	800
TRXA 180	latch needle	2	180	14	positive cams	1:6 - 1:8	3	2-40	250 ¹	electronic	positive	225x130x145 ²	1100
TRXA 180-E	latch needle	2	180	20	electronic dobby	endless	3	2-40	300 ¹	electronic	positive	225x160x145 ²	1500
TRXA 360	latch needle	1	370	14	positive cams	1:6 - 1:8	3	2-40	200 ¹	electronic	positive	225x120x145 ²	1100
TRXA 360-E	latch needle	1	370	20	electronic dobby	endless	3	2-40	200 ¹	electronic	positive	225x160x145 ²	1500

1) the max weaving speed is subject to yarn/fiber performance

2) dimensions include with weft accumulator installed

3) optional available: special kit for weaving unit