



**Automatic book sewing machine**

**ASTER 180**

## ASTER 180 AUTOMATIC BOOK SEWING MACHINE

The new Aster 180 is the ideal choice for customers who need to process all kinds of signatures. Its standard equipment includes automated set-up, Signalynx sequence control and stagger stitch. This enables the Aster 180 to provide easy operation, quick make-ready, high quality sewing and high output.



The Aster 180 can be employed in all types of Meccanotecnica automatic gathering and sewing lines: Uniplex, Multiplex SA, Magix, Bombax and Bombix.



The Aster 180 sewing unit comes in two models: the 42 and the 51. The maximum size of the 42 model is 320 x 420 mm, while the maximum size of the 51 model is 320 x 510 mm. The Aster 180/51 guarantees top performance with two-up signatures coming from web press.



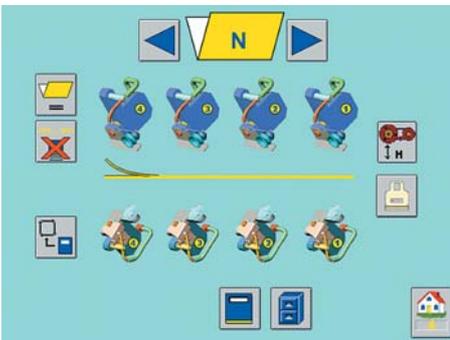
The Siemens PLC S7 controls all machines functions. A swivel touch-screen colour control panel provides:

- quick and easy programming without having to stop the machine;
- storing of up to 30 different sewing programs that can be recalled during production;
- displaying of production data, machine speed and alarm messages;
- automatic variation of the machine speed in case of books with complex signatures;
- automatic set-up.



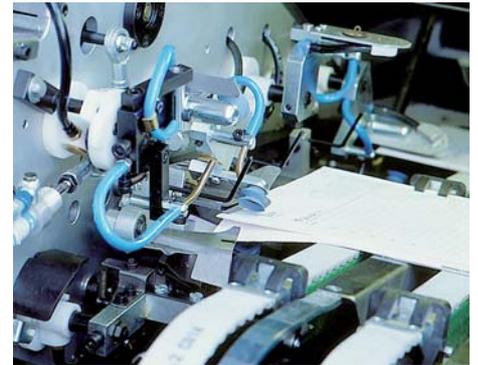
An automatic compressed air control and treatment system is fitted at the entrance to the sewing machine. This includes a pressure regulator and filtering device capable of separating any condensation and impurities coming from the external supply.

The loading hopper is fitted with the Signalynx system that ensures that signatures are gathered in the correct sequence. This device exploits the "artificial vision" technology to reliably recognize even text-only signatures. Just one book is sufficient for the automatic self-learning stage.



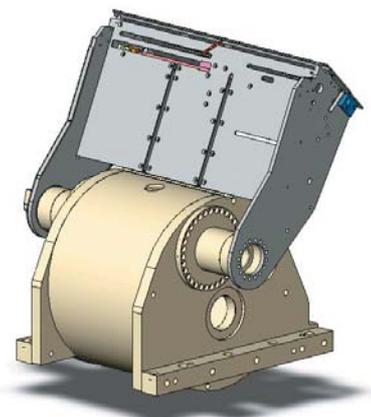
The signature is guided through the opening head equipped with four top and four bottom programmable vacuum openers for maximum opening versatility. The opening angle is kept small to ensure gentle opening of signatures with weak perforations. Porous endsheets are opened reliably by a Venturi-type system featured on the first two top suckers: a special blower creates an air cushion between the sheet to be picked up and the next one, thus eliminating double pick-ups.

The opening head includes the lap opener, a programmable device for mechanical opening of signatures with high and low folio lap anywhere in the book. The lap opener is particularly helpful with come-and-go signatures. The minimum lap required is 8 mm.

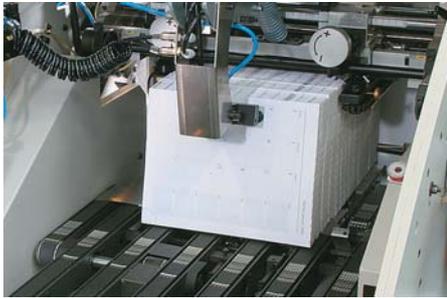


A double reforming station provides optimum preparation of the signature spine for sewing. This results in a reduced number of stops and improved sewing quality.

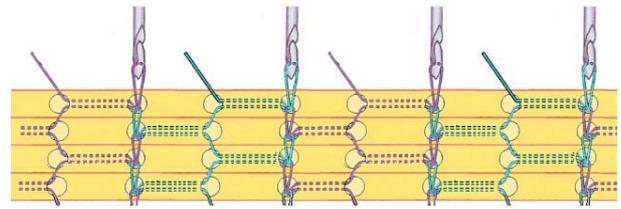
The sewer saddle is driven by a camshaft running in a sealed oil-filled compartment (cam box). This type of drive guarantees exceptionally long cam lifetime, reduced vibrations and noise and no need for maintenance. The sewer saddle is very rigid and strong, being fitted directly on the cam shaft without the need for further intermediate transmission organs.



Two types of sewing stitch are available as standard: conventional stitch and continuous stagger stitch. The stagger stitch reduces the thread build-up along the book spine by alternating the thread position. It is especially useful when sewing thick books printed on thin paper.



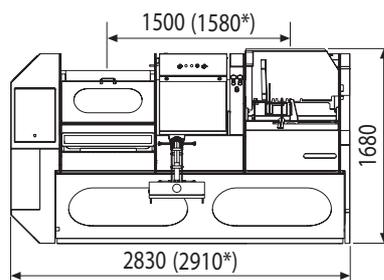
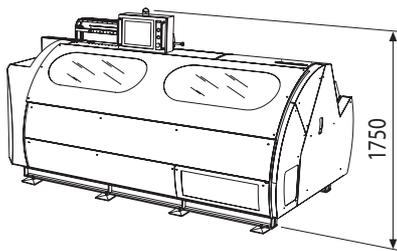
The automatic book separator, incorporated in the sewing unit, separates book blocks from one another regardless of the signature count. The device does not require any additional thread end blocking system. At the delivery, a trimming device automatically reduces thread ends to approximately 10 mm.



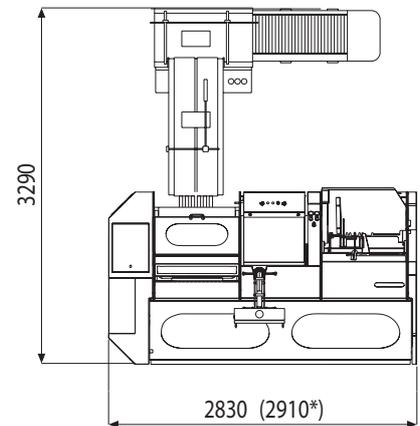
The Aster 180 has an automatic set-up. This important function considerably cuts machine start-up times. The signature size is set via the control panel; servo-mechanisms then automatically position the opening head, the chain in the transport saddle, the accelerator wheel and set the height of the delivery belt.

# ASTER 180

automatic book sewing machine



## ASTER 180 WITH PLUS STACKER



### TECHNICAL DATA

Max. mechanical speed	180 cycles/min	Stitch length	19 mm
Min. size	75 x 120 mm	Rated power	8,08 kW
Max. size	320 x 420 mm (320 x 510 mm)*	Standard voltage	400 V, 50 Hz, 3 phases
Openings available	4 above, 4 below	Air consumption (external supply)	max. 500 l/min at 6 bar
Number of stitch positions	10 (12)*	Net weight	3850 kg (3950 kg)*

(\*) Aster 180/51



The Aster 180 sewing unit bears CE and GS safety marks and has EMC electromagnetic compatibility certificate.