



Box Master™ Reliability Productivity

Robustness

Fully-Automatic Case-Former

BoxMaster™ is an automatic case erector designed to form and seal with adhesive tape or hot melt the bottom of boxes. The machine runs at a variable speed of up to 1.100 boxes/hour according to box dimensions. Machine adjustments are fast, simple and repeatable.

 \bigvee

Safety First – BoxMaster™ incorporates several ✓ Easy-to-use – controlled by PLC and HMI, mechanical

safety features as standard setting with counter

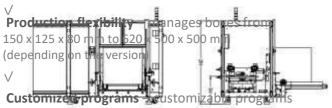
Production capacity – standard box storage √ Modular system

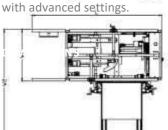
capacity of 150 boxes, 300 boxes as option \checkmark

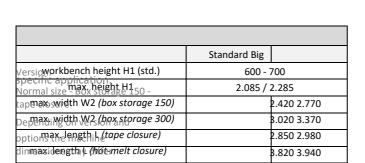
Easy installation – delivered full assembled, with

Production throughput – output up to 1.100 wheels

boxes/hour









The setting and operation are designed to be highly intuitive.

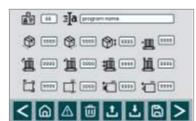
- 7" touch screen control panel Boxes counter
 - Full Siemens architecture Help and diagnostics
- Automatic, manual and step by Production throughput step working mode visualization
- Customizable programs

BoxMaster™

DATASHEET

SOFTWARE

As standard: User friendly Software



 Customizable programs with more than 25 parameters for a perfect setting of the operations according to customer needs.

Program Page

 Autonomous diagnostic with the possibility to control all single machine operations, in order to detect potential errors and operation faults.



Manual Operation Page

COUNTERS ON HANDLES

As standard: Setting-Counters on all relevant handles.

The Counters allow to easily adjust the relevant mechanic settings in a fast and repeatable way.



END- & BREAK-TAPE DEVICE

As standard: Detection of torn tape and end of the tape reel.

BoxMaster automatically detects if the applied tape is broken during the taping process and interrupts the taping process as result.

Further BoxMaster can signalize when the uses tape reel is ending.

END CYCLE & FULL-LINE DETECTION

As standard: 2 Photocells to detect:

a) End Cycle

On the exit of the motorization, to check the exit of the box and stop the machine, if it is not free.

b) Full Line

Can be placed separately at the outfeed conveyor line, to stop the machine after the boxes have piled up. Standard length 5m.



BOX-PRESSOR

As standard: Newly designed slidable Box-Pressor

Easy and fast adjustment to the needed box dimension and possibility to quick change of the Taping Unit, thanks to the newly designed slidable integration. To perfectly process the formed box, through the bottom taping section of the BoxMaster. Avoiding any unintentional upwarding of the box.



SIGNAL EXCHANGE

As standard: Exchange Signals to connect with adjacent conveying systems.

Output:

- Machine working
- Emergency
- Alarm
- Broken tape
 (only for tape box closure)
- Box ready

Input:

Full line

SQUARE BOX FORMING

As standard: Possibility to form squared boxes (Length x Width).

BoxMaster can process squared boxes.

Please consider that for squared boxes the design of flap cutting is important. Contact us for more information.



The system generates a vacuum at the cardboard box suction cups by accelerating the compressed air flow (Venturi effect) without additional drive elements.

Less electrical power consumption and less wearing parts. But increased demand on compressed air.

OPTIONAL: Pump system

Pump-System with lower demand on compressed air. But increased demand on electrical power.

More Technical Details on bottom of page 3.

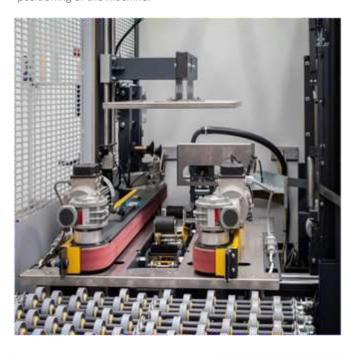


BoxMaster™

DATASHEET

FRAME

Open frame structure, with stiff and strong chassis. This allows a full visibility and access to the mechanical part of the machine for easy maintenance. Wheels on the structure allow an easy positioning of the machine.



FENCES

Clean and modern design. Large doors to enable full access to the inside of the machine.



BOX STORAGE

Lean and strong design to allow easy box loading. Counter on the adjustment for fast and precise box dimension setup.

The standard box storage can store up to 150 boxes, the optional extended version can store up to 300 boxes.



CARRIAGE AXES

Strong design with double 40 mm diameter shaft and ball bushing to allow a precise, smooth and fast movement.



ELECTRICAL & PNEUMATICAL SUPPLY

Vacuum System	Versi	on Power Supply	Power kW	Amps	SCCR	IP class	Air Supply	Air consumption
Venturi (std.)	AC motors	3 PH+N	1,2	4,8	- 3 kA	54	6 bar	3 NL / Cycle
	Brushless motors		2,4	10,2				
Pump (optional)	AC motors		1,9	7,6				1,5 NL / Cycle
	Brushless motors		3,2	13				

DATASHEET

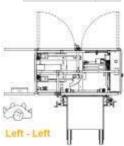
The position of the box storage and of the operator can fit your layout needs, considering the individual box orientation.

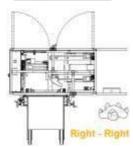












Closure by hot melt. ROBATECH® Hot Melt glue dispenser positioned on an external carriage with casters (other brands available upon request).

Power Supply	
380/400V - 5	0Hz - 3ph
440V – 60Hz -	3ph
Amps 4,5	
Power kW 2,2	4
Phas	e 3Ph + N + PE



BOX REQUIREMENTS

Quality result of the taped box depends on the general box quality and dimensional accuracy, as well as the quality of tape used.

Box Types: FEFCO 0201 - RSC

Flute Type: B, C, E

Wall Type: Single and Double Wall

Maximum operating height (asi)	М	1000
Humidity range	%	20 - 80
Operating temperature	°C	5 - 40
Environmental brightness	LUX	N.A.
Maximum level of noise	dB	Depending on tape quality



Two machine sizes are available dimensions.

to manage different box



Box Dimer	nsions 1	Sta	ndard Big	
1 (*****)	Min.		150 300	
L (mm)	Max.		500 620	
	Min.	125 / 150 2		
W (mm)	Max.		350 500	
	Min.		80 150 3	
H (mm)			450 500	
	Max.			

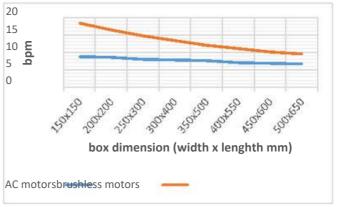
- **1** General Guide: L + W = > 300 mm for Std. and > 350 mm for Big
- ²Depending on the Taping Unit width: K11 (50 mm) or K12 (75 mm)
- ³Optional as Low-Box-Version: H = 80 mm



Max. production capacity: Up to 18* BPM

* Based on the smallest processable box and as Brushless Motor Version for adhesive tape.

The standard version is equipped with AC motors, constant speed, to drive the two carriages, picking from box storage and pushing in the closure station. The high-speed version is equipped with brushless motors.

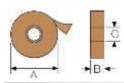


TAPE CLOSURE

Closure by PST tape applied with SIAT taping unit available on 50 mm (2") or 75 mm (3").

Base Material	PVC / OPP / PET / Paper*		
Adhesive Type	Solvent / Hot Melt / Acrylic		
Special Tape	Filament-Tape** / Safety-Seal-Tape ***		

*with limitations **special tape cutting blade required ***need of a test might be necessary



	K11 / K12
Α	Max. 410 mm
В	50 / 75 mm
С	76 mm

- OptiRun System
- Different Working Height
- Pump (instead of Venturi)
- Increased Box Storage capacity

Videos and further information can be found on our website or SIAT Youtube channel.





















