

Machine description / technical specifications:

**LANTECH CASE-ERECTOR C-2000-H-M (hotmelt / mechanical):**



The C-2000-H-M is the case-erector out of the modular series of Lantech. All modular machines make use of the proven techniques out of the Lantech machine program.

The machine is loaded with blanks in an easy way. From the **blank magazine** a blank is picked and opened by the unique **vacuum suction frame** which holds it firmly on two sides. Then the short bottom flaps are folded in and after that the long ones. After all the flaps are folded in, the vacuum is turned off. The case is transported by a **pusher** towards the **closing section** where the case is closed on the bottom side. The closed case will leave the machine and a new blank is picked up (new cycle).

The C-2000-H-M is equipped with several features such as:

### Ergonomic blank magazine:

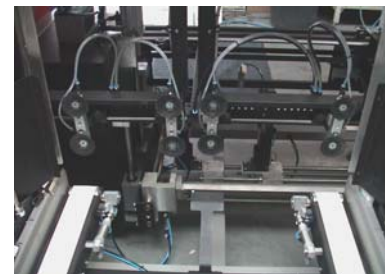
In the ergonomic developed blank magazine, blanks can easily be loaded due to the “walk-in” magazine. The magazine has in basic execution an effective length of 1340 mm. and with this length about 225 blanks of a B-flute (3 mm.) can be stored. The blanks are standing on side conveyors which transport them step by step towards the pick up section. The adjustments of the side guidings of the blank magazine are done by hand wheels.

Automated height adjustment by the Touch Screen Panel. The adjustments can easily be read from counters and measure scales.

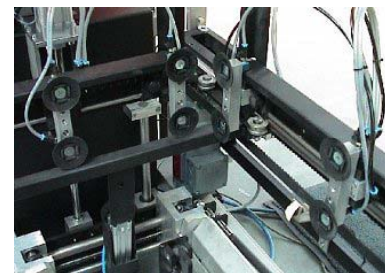


### The vacuum pick up frame:

The vacuum pick up frame takes the unfolded blank on the long and the short side, by means of 8 suction cups. At this moment these two sides are still in one (vertical) plane. The position of the suction cups depends on the case dimensions and can easily be adjusted with locking pins.

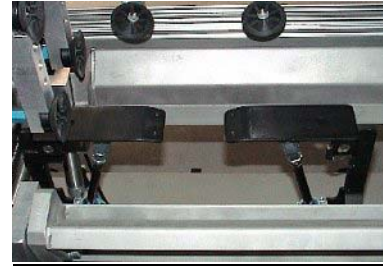


With the next movement the vacuum pick up frame hinges back to an angle of 90 degrees. This movement opens the blank to a case with open flaps. During this movement the blank is always held on two sides.

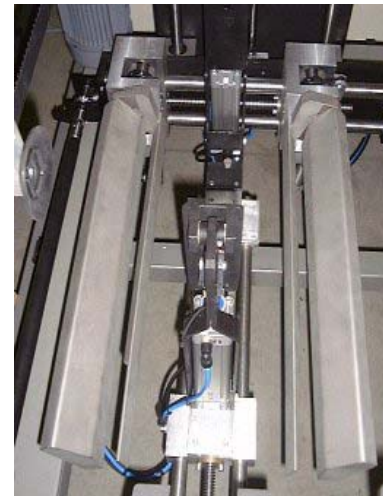


## The flap folding section

Once the blank is opened completely, the short flaps are folded with the short flap folders. In the flap folder in the forward direction a photocell checks the presence of a blank. The distance between the short flap folders is determined by the length of the case and can simply be adjusted by handwheels with counters with linear dimension tables.



Instantly after that the long flap folders will come up. The distance between the long flap folders is adjustable by a hand wheel with a counter with a linear dimension table. Hereafter the long flap folders will close the long flaps and lock the case into a fixed position. This results in an optimal control over the case. Only after all flaps are closed the vacuum on the suction cups is turned off. Then the suction cups are pulled back 5 mm, to avoid wear on the cups while the case is being transported. Holding the case on two sides gives the case a higher stability, so that also cases of a poorer quality can be erected.



## The pusher:

After the flaps are folded the pusher pushes the case in the direction of the closing section. During this movement the case is slid out of the long flap folders and pushed between the two transport belts so that the case is constantly under perfect control.



## Closing unit:

While the case is pushed by the pusher, glue is being applied on the short flaps. After the conveyor belts have taken over they stop the case, and a stamp presses the flaps inside the case. After that the case exits the machine.



## Safety:

The blank magazine is provided with side curtains and transparent top curtain, mounted on the height adjustment bar. The curtains will move with the adjustment on the blank magazine, in order to prevent entrance in the machine.



## Touch Screen Panel:

The operator control box is standard equipped with a Touch Screen Panel, on which all necessary settings can be made. All possible messages will appear on the Touch Screen Display.



## Execution of the case erector C-2000-H-M

- Hotmelt closing
- Adjustments in the machine with hand-wheels
- Automated height adjustment of the blank magazine by Touch Screen Panel
- Mechanical drives
- Transparent Shielding (clear)
- Top guarding polycarbonate above flap folding section
- Blank magazine with side pushers
- Side curtains on blank magazine
- Transparent curtain on height adjustment blank magazine
- Standard touch screen control box Lantech
- Warning "empty magazine" for blanks
- Check "perfectly erected case"
- Tunnel on discharge side of the machine (safety)
- With photocell "discharge free"

## **Protective coating and environment:**

Protective coating colour RAL nr. 7011 (grey)

The machine is suitable for operation in a dry environment at a temperature between +3°C and +40°C.

In case of operation of the machine in areas with:

- high humidity
- dusty and/or dirty environment
- explosive/hazardous environment
- salt water or other corrosive materials

the machine can be configured as such against extra price.

## **Specification of frame:**

- Machine output from right or left, to be determined later.
- Delivery of the machine in conformity with CE norm.
- The machine will be delivered inclusive 1 manual.  
(Operator manual in language of delivery. Technical manual in English).  
More specimens are available against surcharge.

## **Possible options in executions:**

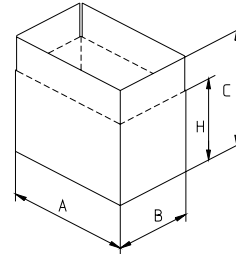
- Capacity increase to 18 cases per minute
- Other RAL colour than RAL 7011
- "Blank magazine almost empty" detection with beacon.
- Integrated operator panel / display
- Higher discharge height for the machine.
- Moveable machine.
- Shortened blank magazine.
- Machine in stainless steel or other protective execution.
- Possibility minimum case width 120 mm.
- Extended machine in length to be able to process longer cases.
- Other electrical material.
- Special trunking.
- Various failure detection possibilities.
- Extra check "case well erected" (for example to prevent machine-damage if cases, which are wrongly glued, cannot be opened)



## Case sizes:

The case dimensions of cases that can be erected on this machine are:

	<b>Minimum</b>		<b>Maximum</b>	
Length (A)	250	mm	650	mm
Width (B)	150	mm	450	mm
Height (C)	150	mm	650	mm



Corrugated quality: B-, and/or C-wave or combinations of these, for other qualities please send us cartons to assess.

## Capacity:

12 cases per minute. (higher capacities possible)

## Technical Specifications:

Electrical connection	:	3 x 400 - 50Hz. – N - earthed
Installed power	:	6 kW
Compressed air connection	:	1/2"
Air consumption	:	10 NI / case
Weight of the machine	:	1250 Kg.
Machine length	:	2575 mm.
Machine width	:	2635 mm.
Machine height	:	2435 mm. ± 30 mm.
Outfeed height	:	600 mm. ± 30 mm.

## Lead time: look on frontpage.

The necessary 200 samples of each case size, for testing the machine, must be delivered to our address, carriage paid and free of charge.

You are kindly requested to add 1 bag of hotmelt granulate which is in use at your works.

## Lay-outs:

Machine lay-out C-2000-H-M-R 3R11337

Machine lay-out C-2000-H-M-L 3R11339

Blank drawing Right 4R10338

Blank drawing Left 4R10339

## **Technical specifications C-2000-H-M:**

Control box	:	Rittal (Colour Ral nr. 7035)
Operating box	:	Bopla
Push buttons	:	Moeller
Selector switches	:	Moeller
Safety switches	:	Merlin Gerin
Thermal cut-outs	:	Moeller
Magnetic switches	:	Moeller
Safety	:	Pilz
Relais	:	Moeller
Connecting terminals	:	Weidmüller
Cable trunking	:	closed with tulen
Main switches	:	Moeller
PLC	:	Siemens S7 313C
Supply 24 V dc	:	Siemens
Frequency control	:	Control Techniques
Photo cells	:	Omron
Proximity switches	:	Omron
Pneumatic components	:	Festo
Reed contacts	:	Festo
Pneumatic connecting components	:	Festo
Drives	:	SEW / Nord
Vacuumpump	:	Becker
Vacuum valve	:	Mac and Festo
Hotmelt-unit	:	Robatech Concept 5
Door switch	:	Schmersal

Deflections in execution and to be applied components, which result in extra work fall out of the purpose of this quotation.