



User Manual Labelling machine

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Introduction

This user manual has been made for everyone who has to work on or with the machine. You should read this manual before starting to work on or with the machine.

The user manual contains important instructions and information on how to use the machine safely, competently and economically. The user manual must always be available at the place where the machine is used.

The user manual must be supplemented with instructions based on existing national regulations relating to accident prevention and environmental protection.

This user manual contains information about the operation of the machine with all possible options. Use only that information that is applicable to your machine. Depending on the intensity of use and customer wishes, this machine can be equipped with various options. Please consult your sales advisor for details.

Supplier details if not supplied directly by Martin Stolze BV. Dealer stamp:	

Martin Stolze BV guarantees the proper operation of the machine for 6 months after delivery, but is not liable for consequential damage to buildings, other machinery or the surroundings caused by the pot-washing machine by any cause whatsoever.

Martin Stolze BV is constantly seeking to improve its products and services. We therefore reserve the right to change the specifications given in this user manual at any time and without prior notice.

This product is supplied according to the general delivery and payment conditions published by the Metaalunie and referred to as the METAALUNIE CONDITIONS or the SMECOMA CONDITIONS.

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Martin Stolze BV is not liable for damage and indirect damage that result from operating errors, lack of competent maintenance and any use other than that specified in this user manual.

The liability of Martin Stolze BV also lapses as soon as modifications or extensions are performed on the machine by you or third parties without prior written permission.

This machine is only suitable for process and environmental conditions as stated in the 'Specifications and tolerances' section of this user manual. No other use is permitted by Martin Stolze BV and can result in danger for the operator and/or his/her surroundings.



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1 Technical specifications

In this user manual, the definitions set out below shall apply;



These are the areas in, at and around the labelling machine where there is a potential risk of injury.



The person who operates, checks, and is watchful of the proper operation of the labeling machine, and can start and stop it.



The person who is fully acquainted with the entire labeling machine, can adjust the safeguards and can perform maintenance of the labeling machine. The maintenance technician knows the functions, safety standards and has been trained in the installation and maintenance of the machine. It is the responsibility of the company using the labeling machine to ensure that the maintenance technician is appropriately qualified.

Length x Width x Height (adjustable)

Max. roll diameter Max. label roll height

Weight

Maximum number of stickers / hour

Stepping motor

Sticker labeling machine speed, from / to

Electric connection ***
Sound pressure level

570 x 570 x 1270mm

280mm 60mm 42kg

number depends on size of sticker

W95 / 24V

m/min. 0 / depending on sticker size Volt/Amp 100-240 / 6 / Euro plug

dB(A) < 70, measured at a height of 1.6 m

and a distance of 1.0 m

*** different connection voltages are available upon request

Options (#)

- buzzer indicating machine run out of stickers
- ball-and-socket joint adjustment



2 Safety

2.1 Safety symbols

The labeling machine is provided at various points with standardized safety pictogram stickers such as the adjoining pictures.

The upper part warns of a general or a specific hazard or risk.

The lower part identifies the kind of hazard to which the warning relates or it indicates what you **should** or **should not** do.



2.2 Safety instructions

Use the labelling machine only for the purpose for which it has been designed. $\label{eq:control}$

Your machine is provided with the pictograms shown below.

Familiarize yourself with these pictograms and know their meaning.

This chapter on safety is divided into:

- General safety instructions
- Specific safety instructions

General safety instructions

Caution!

Before starting to work with the labelling machine, read this user manual carefully so that you know exactly what the adjustment features and switches are for.

Also read the user manuals of any associated coupled machines.

Caution! Before carrying out any maintenance work.

- 1 Consult the user manual.
- 2 Switch off the main switch and disconnect the plug from the socket outlet.
- 3 Press the emergency-stop switch
- 4 Place a warning board "Maintenance Out of order".

This way, you will avoid any hazardous situations that could occur in the event the labelling machine should suddenly start working. One could also think of an unexpected mishap or something accidental.

Caution! Risk of injury from a collision when carrying products to and from their location.

When driving for instance a fork-lift truck with a pot fork or a tractor with trolleys, make sure that there are not any obstacles and that there is nobody in the driving zone.

Caution! Risk of injury at the labelling machine.

The following persons could be seriously injured when working at or near the labelling machine:

- persons under 16 years of age
- persons who may be expected *not* to be able to (sufficiently) recognize the hazards associated with the labelling machine.

Caution! Risk of injury. Test the emergency-stop switch at least once a day.





Caution! Risk of injury.

Ensure there is sufficient lighting at and around the labelling machine.

Caution! Risk of injury.

Ensure that the safety instructions and method of working are completely passed on to new users of the labelling machine.

Caution! Risk of serious injury.

Ensure that unauthorized persons and, in particular, children are kept away from the labelling machine.

Caution! Risk of injury.

Ensure that the labelling machine and the area around the labelling machine are cleaned regularly, and that spilled pot filling and plant residues cannot hamper the proper functioning, operation and control of the machine.

Caution! Risk of injury.

Ensure that warning stickers remain clearly visible and replace them immediately when damaged.

Caution!

When replacing parts, use only MARTIN STOLZE B.V. or CE-certified parts.

Caution! Risk of injury.

Use the labelling machine for the sole purpose as described in section 4.2 "Scope of use". If in doubt, consult your supplier.

Caution! Risk of injury.

See to it that electric connections and maintenance are carried out competently.

Specific safety instructions

Caution! Risk of serious injury due to being trapped at the sticker unwinder and the backing-strip rewinder.

Used in combination with (an) other machine(s), the sticker labeling machine can start automatically and so may start operating "unexpectedly".

In the event of any malfunction or a pot plant tipping over, keep hands away from the moving parts.

When changing the sticker and backing-strip rolls, ALWAYS press the emergency-stop switch. First stop the sticker labeling machine, then remedy the fault.

Caution! Risk of injury due to being trapped at the backing-strip guide rollers, pressure brush, pressure roller and the guides for the flowerpots passing by the machine.

First stop the sticker labeling machine, then remedy the fault at these parts.

Caution! Risk of injury due to being trapped if the sticker labeling machine has been installed in an unstable position.



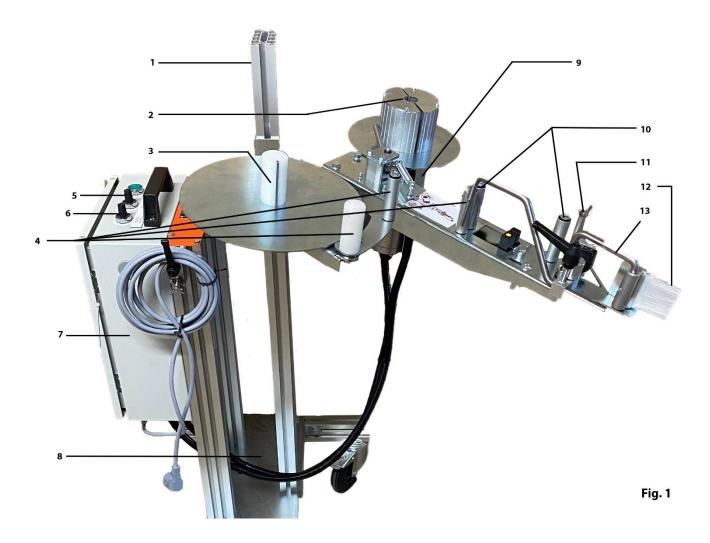




3 Description of working / scope of use and parts to be used

Working, Figs. 1

- 1 Column for vertical adjustment
- 2 Backing-strip rewinder
- 3 Sticker unwinder
- 4 Sticker guide rollers
- 5 Speed potentiometer
- 6 Sticker travel potentiometer
- 7 Switch box
- 8 Base, # swivel castors
- 9 Stepping motor for rewinding backing strip
- 10 Backing-strip guide rollers
- 11 Sticker peel-off point
- 12 Sticker pressure brush
- 13 Brush holder

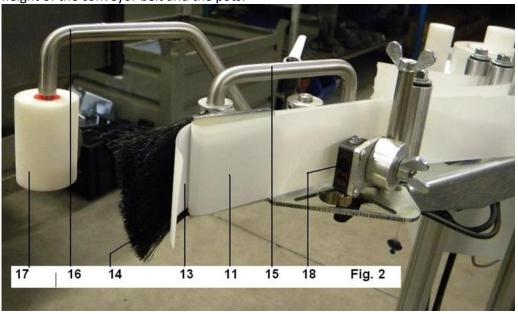


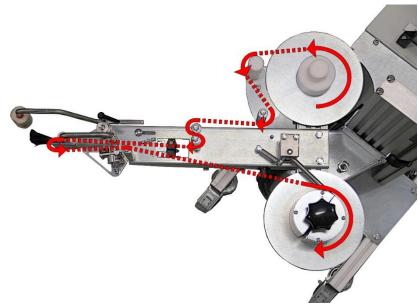


3.1 Working of sticker labeling machine

The sticker labeling machine has been designed to fully automatically unwind rolls of self-adhesive sticker labels while simultaneously removing them from the backing strip and applying them to pots passing by the machine, and to rewind the remaining backing strip. The backing-strip rewinder (2) is driven by a stepping motor (9). This motor using several guide rollers (4 and 10) pulls the strip with stickers each time the photocell (18) detects a pot. A programmed PLC ensures the proper switching sequence and switching times. Sticker travel can be controlled by adjusting the potentiometer (6) as needed. This feature is particularly useful for long stickers so that the strip is already partly unwound before the stickers are applied to the pots. The potentiometer (5) is used to adapt the unwounding speed to the speed of the feed/outfeed belts of the pots. The pressure brush (12) and pressure roller (17) press the sticker firmly to the pot.

For tapered pots, the sticker labeling machine can be provided with a ball-and-socket joint holder so that the sticker label applicator arm can be set in any position in accordance with the pot taper circumference. The adjustable holders (15 and 16) can be used to adjust the brush and the roller so that the sticker is properly pressed on. The sticker label applicator arm is vertically adjustable and can be adapted to the height of the conveyor belt and the pots.







3.2 Scope of use

The sticker labeling machine is designed to automatically apply stickers to the side of flowerpots.

The automatic sticker labeling machine is suitable only for:

- pots whose sides are sufficiently clean
- pots having predetermined sizes
- stickers as specified by you when ordering the machine from us

Use the automatic sticker labeling machine only for the purpose for which it has been designed.

The electric components of the sticker labeling machine are drip-proof. Therefore, the machine must be installed "indoors".

Use the sticker labeling machine exclusively for the activities mentioned in this chapter (4.2) because the CE-marking does not apply to any other activities.

The sticker labeling machine must **not** be used for pots or other kinds of containers that contain:

- toxic substances
- explosive substances
- hazardous substances
- flammable substances

Only "original" MARTIN STOLZE b.v. or CE-certified parts and accessories are allowed to be used for the sticker labeling machine.

MARTIN STOLZE b.v. is excluded from any damage and consequential damage resulting from any parts not being "original" parts supplied by us.

4 Putting into operation

Ensure that the installation of the sticker labeling machine complies with the general and local building regulations.

Ensure that the sticker labeling machine is positioned with proper stability and that the # swivel castors and vertical adjustments are blocked.

Ensure that the sticker labeling machine is easily accessible from all sides, especially the switches and emergency-stop button.

The sticker labeling machine is suitable only to be used in covered areas. The electric components are splash-proof only.

Ensure that the electric connection complies with the general regulations laid down in NEN EN 60204-1 and NEN 1010. The switch box must meet the requirements of NEN-EN-IEC 60439-1, and any local regulations. Note for countries outside Europe: make sure the electric connection complies with (equivalent) standards and regulations as applicable to the machine in your country.

The electric connections and controls must be carried out in accordance with Annex I by a recognized firm of electrical contractors.

Pay special attention to the execution of the emergency-stop circuit.

Press the emergency-stop switch



First insert the plug into the power socket. (The power supply must be 100-240V/6A) (# different connection voltage is possible)

Make sure that you and the person who will work with the sticker labeling machine are thoroughly familiar with the safety instructions (chapter 3) contained in this user manual.

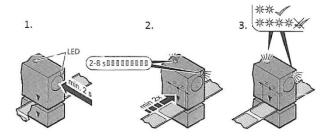
Always check to ensure that the sticker labeling machine is working properly, and unwinding and rewinding smoothly and without jerks.

Check, in advance, the feed and outfeed belts of the pots for any obstacles, and check the sticker-strip unwinder to ensure that there are enough stickers.

Keep the sticker labeling machine clean; remove potting soil, pot filling, plant residues, pieces of packaging material etc. regularly (at least every day).

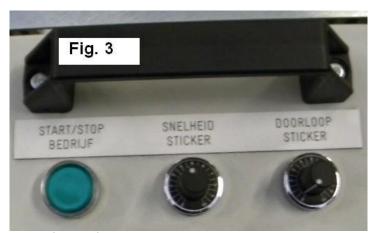
If you find a defect or any damage, you must not use the machine until repairs have been competently carried out by a firm recognized by Martin Stolze b.v.

4.1 Operating the machine



LABEL TEACH-IN PROCEDURE

- Press yellow button at least for 2 seconds, with the label in the sensor.
- 2. Yellow LED will blink for 2 to 8 seconds, then feed through at least 2 stickers.
- 3. Yellow LED blinks 2x = OK, Yellow LED blinks 4x = ERROR



Operation, # Fig. 3.

The control box of the sticker labeling machine may be located, #, on the main frame.



The control box is provided with a start/stop push button. The emergency-stop button is released by turning the button to the right (clockwise).

Also, the control may be included in the control box of (a) coupled machine(s); the conveyor system may conceivably be included in a PLC-sequence control system.

4.2 Switching on

To switch on, proceed as follows:

- Insert the plug into the plug socket, then the plug into the wall socket or the socket of the coupled machine.
- Release the mechanical emergency-stop switch (turning clockwise).
- Each time before starting the sticker labeling machine, check to make sure there are not any loose parts or other defects, and check the machine for any tools or other objects accidentally left on it. They could seriously damage the moving parts.
- Adjust sticker travel and speed of unwounding the sticker roll to the speed of the feed belt of the pots using the black turning knobs on the control box.

4.3 Switching off

The sticker labeling machine can be switched off by pressing the start/stop push button.

Power interruption

In the event of a power interruption, the sticker labeling machine will always switch off (by operation of the no-voltage coil; this safeguard is integrated with the switch unit). The sticker labeling machine can then be switched on only after having taken specific action, see **"Switching on"**.

No-voltage

If the sticker labeling machine is supplied without no-voltage, the sticker labeling machine may be used only in combination with a transmitter or a power box with no-voltage protection.

5 USE

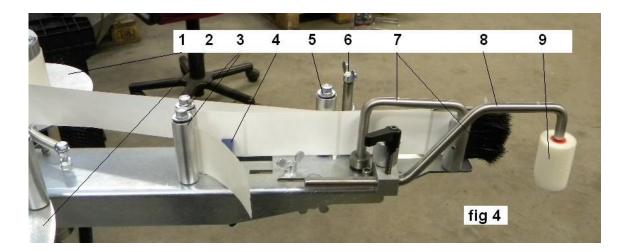


Fig. 4



- 1 Backing-strip rewinder
- 2 Sticker roll unwinder
- 3 Guide rollers
- 4 Fork sensor (sticker detection)
- 5 Guide rollers
- 6 Photocell adjustment
- 7 Brush adjustment
- 8 Pressure roller adjustment
- 9 Pressure roller
- Familiarize yourself with the sticker labeling machine, the switches, potentiometers and photocell.
- Familiarize yourself with the positions of the rewinder (1) and unwinder (2) and the "routing" of the backing strip with stickers
- Familiarize yourself with the brush (7) and pressure roller (8 and 9) adjustments
- Familiarize yourself with the photocell adjustment

Caution! Risk of serious injury due to being trapped at the sticker roll unwinder and backingstrip rewinder.

Used in combination with (an) other machine(s), the sticker labeling machine can start automatically and so start operating "unexpectedly".

In the event of a malfunction or a pot plant tipping over, keep hands away from the moving parts.



When changing the sticker and backing-strip rolls, ALWAYS press the emergency-stop switch.

First stop the sticker labeling machine, then remedy the fault.

Make sure you have read or the person operating the sticker labeling machine has read the safety instructions (chapter 3).

Keep the sticker labeling machine and the area around the sticker labeling machine clean.

Use the sticker labeling machine only when you have thoroughly studied the preceding pages and you have no more questions.

In the event of a fault, ALWAYS press the emergency-stop switch before remedying the fault.

Ensure that no person can come in the vicinity of the moving parts when the machine is in stand-by

Moving / Storage

When the sticker labeling machine is to be moved, it must be switched off and the plug disconnected from the power point.



6 MAINTENANCE

When carrying out maintenance, at all times observe the safety instructions described in chapter 3.

Make a permanent employee responsible for the regular maintenance of the belt conveyor.

When carrying out maintenance, always place a warning board "OUT OF ORDER, MAINTENANCE" on the control unit and press the emergency-stop switch.

Thoroughly clean the conveyor belt and the area around it each time it has been used.

Have adjustments, settings and repairs carried out by a person recognized by MARTIN STOLZE B.V.

If in doubt, always consult the supplier.

6.1 Lubrication and maintenance schedule

The following maintenance instructions are based on normal use. For intensive use or use under extreme conditions, maintenance must be carried out at shorter intervals.

d = daily	w = weekly m=monthly	d / w/m	
1	Clean sticker-roll unwinder and backing-strip rewinder		w
2	Clean guide rollers	-	w
3	Regularly check the ON-OFF switch for proper functioning		
	(such as for instance the emergency stop)	-	d
4	Clean photocell	-	w

6.2 Annual (general) overhaul

See 9.1

Thoroughly clean the sticker labeling machine each year, including

- removing all dirt/fouling from the sticker labeling machine using compressed air.
 - Never use a steam cleaner!
- checking all moving parts and bearings of the unwinder, rewinder and guide rollers for play

Repairs on the sticker labeling machine must be carried out by a recognized expert designated by Martin Stolze b.v.



7 ENVIRONMENT

Life span

The life expectancy of the labeling machine depends on maintenance, operating hours and conditions of the environment (dust, dirt/fouling, humidity and the like).

Proper maintenance will benefit the life of your machine.

Scrapping the conveyor

Have the removal and processing preferably carried out by a recognized scrap yard that has the requisite permits.

Designate a competent person to be responsible for supervising the execution.

Waste disposal

Designate a competent person to be responsible for supervising the disposal.

Sort disassembled materials according to material properties and contamination.

Separate all materials falling within the category of chemical waste such as oil and lubricants.

Dispose of them as chemical waste.

Make sure residual materials go to recognized waste processing plants that have the requisite permits.

8 FAULTS

Fault condition	Cause	Solution
Stepping motor not running	 No power, plug not in power socket Emergency stop activated 	 Plug in power socket, Check for correct voltage Release emergency stop (ch.6)
Backing-strip rewinder does not stop	Photocell fouled or defect	Clean or replace
Thermal cut-out tripped	Unwinder, rewinder and guide rollers too heavily loaded	Check unwinder, rewinder and guide rollers
Stickers insufficiently pressed on	Brush and/or pressure roller improperly set	Readjust



9 EC DECLARATION OF CONFORMITY

EC declaration of conformity for machines (Directive 2006/42/EC, Appendix II, under A.)



Martin Stolze b.v. Leemidden 6 2678 ME De Lier The Netherlands

Declares that:

Machine: Labeling machine

is in conformity with the **Machinery Directive 2006/42/EC** and satisfies the provisions of the **EMC Directive 2014/30/EU**.

Satisfies the harmonised European Standards:

Harmonised European Standard	Description	Harmonised European Standard	Description
NEN-EN-ISO 12100:2010	Safety of machinery – General principles for design – Part 1: Basic terminology, methodology	NPR-ISO/TR 14121- 2:2010	Safety of machinery – Risk assessment – Part 2: Practical guidance and examples of methods
NEN-EN-IEC 60204-1	Safety of machinery – Electrical equipment of machines – Part 1: General requirements		



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