

THOMECH

Machinebouw & Mechanisatie.



MAART 2024

INSTRUCTION MANUAL

Naaistraat NS10-50HA

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1 IMPORTANT – USER MANUAL

This manual describes: operation, operation, maintenance, transport, storage, installation, cleaning and repair of the machine. The images/drawings used may differ slightly in some cases.

This manual has been drawn up in accordance with the legal requirements, as laid down in the Machinery Directive, which in the Netherlands is included in the Machinery Decree (*Besluit Machines*).


This manual must be made available to everyone who carries out work with or on the machine. The user manual must be kept in an accessible place.


Liability


- Thomech BV is not liable for damage and indirect damage resulting from operating errors, lack of expert maintenance and any use other than described below.
- The liability of Thomech BV also lapses as soon as work, such as adjustments or extensions to the machine or accessories, is carried out by you or by third parties without our permission.

Definition

The following terms and symbols are used in this manual. These terms provide important information about the machine. Make sure that everyone who works with the machine understands this information.

	WARNING!
	Failure to carry out this method carefully can cause (serious) injuries or damage.

	ATTENTION!
	A note with additional information; alerts you to possible problems.

	FOR YOUR INFORMATION!
	Gives you suggestions and advice to make certain tasks easier to perform.

Users

The user here means anyone who: transports, installs, operates, maintains, adjusts, cleans, repairs, etc. the machine.

It must be taken into account that instructions given to the user correspond to his/her level of training and experience. This also applies to handing over this manual. The level of training and experience is known to managers who reasonably know which user can apply the manual and/or who receives which instructions.

Guarantee

The warranty for this machine is 12 months. The warranty is only valid if: the equipment is installed, used and maintained as described in this user manual.

The warranty expires if you or third parties carry out work, such as adjustments or extensions, to the machine or accessories without our permission.

2 MACHINE DESCRIPTION

2.1 PURPOSE OF THE MACHINE

The machine is intended exclusively for the following uses:

Sewing 10, 25 and 50 kg jute or net bags as known in potato cultivation.

The manufacturer of the machine has made every effort to provide you with a safe product. Please note that the machine is only safe if it is transported, installed, used and maintained correctly. Therefore, read this manual carefully and ensure that anyone who uses the machine has done so as well.

G	ATTENTION!
	Any use of the machine other than described in this manual is not permitted.

2.2 TECHNICAL SPECIFICATIONS

General technical specifications:

Power connection

Tension: 3F+N 400Vac

Assets: 8A 3,7kw

2.3 TRANSPORT AND STORAGE

Transport

The machine is intended for a fixed installation and therefore cannot be moved without dismantling. If the machine is moved, this must be done with suitable lifting and hoisting equipment.

Storage

The machine and/or parts thereof must always be stored in dry and dust-free areas. Pay extra attention to any cables, make sure they are not damaged. Before storage, clean the machine and seal the storage area.

The ambient temperature during storage should be between 5°C and 40°C.

2.4 DISPOSAL


If the machine's lifespan has come to an end after many years of use, remove the machine and dispose of it.

- Disconnect the machine from the power supply by disconnecting the power supply in the company installation;
- Remove the fuses from the company installation;
- Remove the remaining products;
- Disconnect the cables from the machine.

The machine is mainly made of steel and can be recycled in the usual way, whereby the different types of materials must be separated as much as possible in order to be reused. When discarding, pay attention to the applicable regulations.

Bij de machine zijn de volgende materialen gebruikt:

- Steel (housing);
- Copper (cables);
- Plastic (cables, rolls of strings, etc.);
- Electronic components (heavy metals).

	FOR YOUR INFORMATION!
	Most parts of this machine are recyclable.

3 SAFETY


3.1 INTRODUCTION

Relevant safety regulations

Based on CE guidelines and harmonized standards, various technical measures have been taken to ensure that the machine meets the current safety requirements.

Noise level

The sound pressure level of the machine is lower than 70 dB(A).

	WARNING!
	Neem de algemene veiligheidsvoorschriften in acht.

3.2 SAFETY REGULATIONS GENERAL AND FOR INSTALLATION, MAINTENANCE, REPAIR, ADJUSTMENT AND USE

Requirements for users of the machine

Only persons authorized by Thomech BV may install, maintain, repair, adjust and operate.

Guards

Place all guards on the machine before commissioning and secure with the appropriate fasteners.

Machine capacity

Only use the machine within the specified limits in terms of capacity, powers, speeds and options.

Unintentional start-up

Disconnect the power supply from the machine, always set the maintenance switch to the 0 position, lock it with a personal padlock and take the key with you. Only carry out work on the machine after these actions. If necessary, also switch off the main machine.

Restart

Start the machine with extra caution after carrying out work (such as maintenance, repairs and adjustment of the machine). Make sure you wear protective clothing, if applicable.

Reparatie van de machine

Repairs to the machine may only be carried out by an authorized technical service designated by Thomech BV.

Damaged parts

First determine the possible cause of the damaged parts or shields. Only put the machine back into operation after repairs have been made and the cause of the damage has been removed.

Right tools

Always use the correct tools or accessories for work (such as securing and unblocking parts). Make it a habit to properly remove or replace tools and/or parts on the machine before starting the machine.

Components

Always use original parts or parts with the same specifications and properties for repairs. The use of non-original parts may lead to reduced performance, dangerous situations or higher costs.

Fire hazard

Be aware of the risk of fire when changing oil, working with solvents and working with other substances. Smoking and open flames are prohibited.

Electric

Only qualified personnel (appointed by Thomech BV) from an authorized technical service or manufacturer may, under certain conditions, work on the electrical parts. Always disconnect the power supply from the machine. The maintenance switch must be switched on before any work is carried out on the electrical installation *0 position*. When carrying out maintenance work, always disconnect the machine from the power supply first.


Direction of rotation

After work that may influence the direction of rotation of the machine, check the direction of rotation of the machine when starting up.

Hoist

Always take the weight of parts into account when lifting them. Use good tools and a safe lifting method. Never walk or stand under lifted parts. Falling objects can cause serious injuries.

G	ATTENTION!
	Accidents are often caused by a series of special and deviating circumstances from the normal situation. If an abnormal, unsafe or special circumstance occurs, resolve it first.

	WARNING!
	Before performing maintenance: <ul style="list-style-type: none">▪ Stop the supply (lines) of the machine;▪ Place the machine in the basic position;▪ Set the switch to the 0 position;▪ Disconnect the machine from the power supply;▪ Disconnect the machine from the air system;▪ If possible and/or necessary, remove the products from the machine.

G	ATTENTION!
	Use personal protective equipment with a CE mark.

3.3 SAFE WORKING METHOD

General

The machine must only be operated by a properly instructed/trained person (appointed by Thomech BV).


Operator instruction


In particular, attention should be paid to:

- ✓ The dangers associated with the operation of the machine;
- ✓ The operation of the machine, its correct use and adjustment;
- ✓ All safety functions;
- ✓ Safe working methods with the machine.

Supervision

Always supervise the machine. Never leave the machine unattended for long periods of time. First switch the machine off completely. Leave the machine when it has come to a complete stop. Lock the maintenance switch.

	WARNING!
	Observe the safety regulations for a safe working method.

	WARNING!
	As a result of environmental noise (e.g. other machines), the noise level can exceed 70 dB(A). Then use hearing protection.

4 INSTALLATION

During the first installation, a new installation or when changing the machine or environment, the installation instructions below must be taken into account. Always carry out a risk analysis when making changes to the machine.

4.1 GENERAL

Reception

After receipt, check the machine for damage. If there is any damage, please contact the manufacturer before using the machine.

Installation

The installation was carried out by the manufacturer according to drawing specifications. If a new installation is required, the manufacturer must be contacted. The control panel must be placed in such a way that the operator has a full view of the machine during operation.

Environment

The machine should preferably be used at an ambient temperature of 5° - 40°C. The following indications apply to the relative humidity: maximum 20% at 40°C (higher relative humidity permitted at lower temperatures, for example 50% at 20°C).

Relief

The area surrounding the machine must be provided with sufficient lighting. The illuminance must be at least 300 Lux.

Ergonomics

In ergonomic area, please note the following:

- ✓ Ensure a healthy working posture;
- ✓ Avoid having to reach far with heavy loads;
- ✓ If possible, perform your work alternately between standing and sitting;
- ✓ Use colleagues or aids when lifting heavy loads.

You can find more information about responsible working from your safety expert.

4.2 INSTALLATION INSTRUCTIONS

When installing or reinstalling or changing the machine or environment, the installation instructions below must be taken into account. Always carry out a risk analysis when making changes to the machine.

Installation

The machine is delivered as a whole.

Grounding

The entire machine must be earthed with an external earth. The machine must never be put into operation without this connection.

Setup area

1. The atmosphere must be free from: dust, acid gases, flammable gases and corrosive gases and salt;
2. Do not expose the machine to direct sunlight or heat radiation that causes the ambient temperature to exceed the specified limits;
3. Do not expose the machine to vibration;
4. The maximum altitude for using this machine is: 0-1000 meters;
5. The machine may not be used in an environment with a risk of fire and/or explosion.

Building

The machine must be installed in a building that complies with national building regulations. There must be sufficient lighting, extraction and ventilation.

Fire protection

Fire extinguishers and other suitable fire-fighting equipment must be present in the immediate vicinity of the machine. Local regulations must be observed for this.

Stability

The user must ensure that there is a sufficiently sturdy floor or foundation. If in doubt, have a structural investigation carried out. The machine must be placed in a stable position and must be anchored to the floor.

Control panel placement

The control panel must be placed in such a way that the operator has a full view of the machine when operating the machine.

Mains voltage conditions for electrical equipment

The electrical equipment is designed to be used under the following conditions: The supply voltage is 0.9 - 1.1 x rated voltage. The frequency of the supply voltage is 0.99 - 1.01 of the nominal frequency (50 Hz).

Electrical installation

The following requirements apply to the electrical supply:

- ✓ Electrical installation must comply with the applicable regulations;
- ✓ The power supply must be protected against overload (what is the power consumption, nominal current or cable cross-section?);
- ✓ The power supply must be protected against earth leakage with an earth leakage circuit breaker;
- ✓ Ensure that cables are properly laid in cable ducts so that no damage can occur.

5 OPERATION AND OPERATION

Before the machine can operate, the machine must be installed, constructed and tested as described in this manual. This chapter briefly describes how to start a normally set machine. Normal setting means that the machine can run properly.

The description is structured as follows:

- Operation of the machine;
- Description of the operating parts.

5.1 MACHINE OPERATION

General operation

Place a jute bag under the filling funnel of the sewing line, which is filled with the desired number of kilos by the weigher. During dumping, the underlying sewing tape is stationary, so that the bag is filled vertically. When the weigher gives the signal that the bag has been dumped, the sewing belt starts to rotate and the bag is transported by the gripper to the two infeed belts of the sewing line. The feed strings feed the bag together with the conveyor belt to a sensor located just in front of the sewing machine, after which the feed stops.

When the next bag (just like the first bag) is drained and the signal from the weigher indicates that it has been dumped, the second bag is also fed in and the sewing machine (because the first bag is in front of the sensor) receives a signal that it is empty. can start spinning. When the bag arrives at the sewing machine, the sewing machine feed dog takes the bag from the two infeed belts and the bag is sewn closed.

A pulse is also given that the ticket machine adds a card. The second sensor takes over this contact and ensures that the sewing machine continues to run. When the second sensor is released again, the sewing machine stops sewing and the thread is cut. Then the input stops again, because the second bag comes in front of the sensor.

De cyclus is nu klaar en begint bij een volgende zak opnieuw.

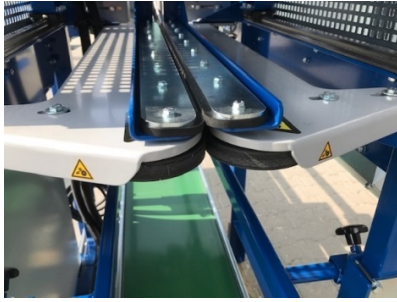
Explanation of operation with images

Operation starts as follows:



(Jute bag under the hopper)

- The bag is kept open and hooked behind the flaps;
- When the bag is hooked behind the flaps, the button of the bag clamp can be pressed. A signal is now sent to the weigher that the sewing line is ready to receive the product. The grab will also come forward towards the bag clamp.



(Input strings)

- When the weigher has completed the unloading, the signal “unloaded” is given from the weigher to the sewing line. The gripper closes and the bag clamp releases the bag.
- The bag is fed between the belts because the gripper, the sewing belt and the strings guide the bag synchronously into the sewing line. The bag continues to the sensor for the sewing machine and stops. The machine is now ready to receive the next bag.



(Bag detection sensor)

- As the next bag is fed, the penultimate bag passes to the sewing machine sensor. The sensor detects the bag, causing the sewing machine to start. The bag is fed through and the (optional) label is sewn along.



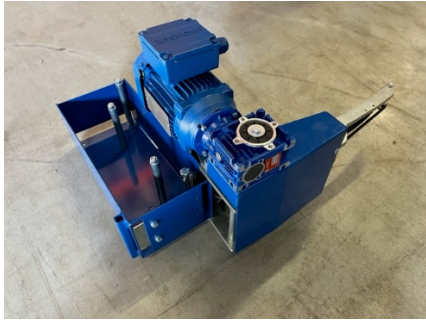
(Sewing machine)

- Als de zak de naaimachine heeft verlaten en voorbij de sensor aan de achterzijde van de naaimachine is, stopt de naaimachine. De draad wordt geknipt door het mes dat achter de voet van de naaimachine zit.



(Cutting knife)

- Als optie kan er tijdens het naaien een label aan de zak worden aangenaaid. Dit gebeurt door de kaartautomaat.



(Ticket machine)

Ticket machine

If this is set in the program, a card will be added when the sewing machine is started. When this signal is given, the first roller closes pneumatically and pulls in the card. The second set of rollers in the card machine spin faster, causing the card to be torn into the perforation. The card is then inserted between the timing belt and continues to the sensor. Here the card waits until the sewing machine is started again and the cycle is repeated.



(Ticket machine sensor)

Enter ticket machine

Push the card between the brush and press it between the first set of rollers that are open.



(Card index)

The photo above shows how to place the cards in the tray. Make sure that not too many cards are placed in the tray, as this is not good for the operation.

Once the cards have been placed correctly in the tray (through the brush and between the first two rollers), press enter card on the Touch panel. The card is then fed to the sensor and is ready for input.

5.2 SEWING MACHINE



(Naaimachine)



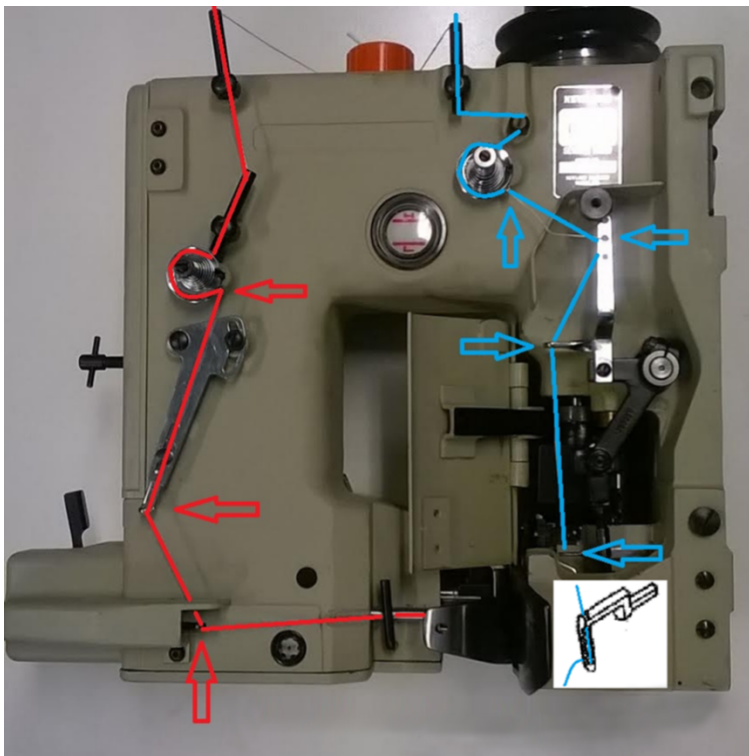
WARNING!

First activate the emergency stop for safe working on the sewing machine!

To be able to rotate the sewing machine out of the frame, the spindle must be loosened using the black knob. Now the sewing machine can be turned away from the strings.

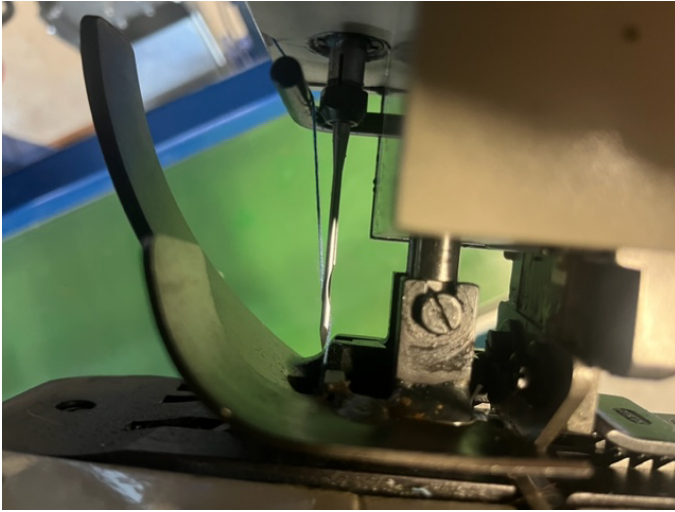
Some common activities on the sewing machine are:

- Re-feeding the yarn; this may be because the spools of thread have run out or because there is a broken thread. The image below shows how the wire should properly run through the machine.



- It is necessary to occasionally clean the machine with air and lubricate the rotating parts.

- It may also happen that the needle is no longer sharp or breaks; then replace it with a new one. Make sure that the hole through which the thread passes is horizontal and that the ground part in the needle points towards the output side of the sewing machine.



(Needle position)

Sewing tape

Some points of attention for the sewing tape are described below:

- Make sure your sewing tape is adjusted to the correct height. Adjustment can be made by hanging an empty bag on the bag clamp;
- When hanging an empty bag, make sure that the bottom of the bag touches the belt;
- When filling the bag, check whether the bag does not slip off the hanging clamps because the strap is too low. Once the bag is filled, check whether the product in the bag can pass under the strings;
- For best performance, it is recommended that the filled bag fits just below the feed strings, so that there is sufficient pocket at the top to continue sewing.

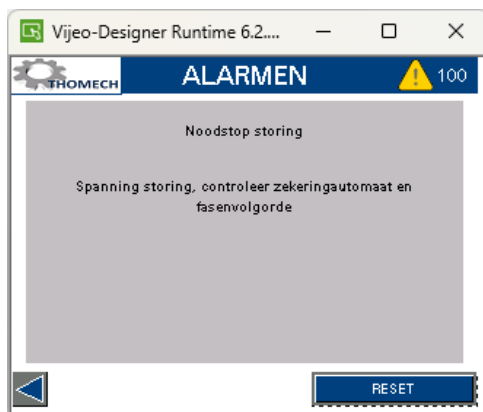
5.3 CONTROL PANEL DESCRIPTION

5.3.1 Start screen



1. Alarm messages, the current alarms are displayed here (see 5.3.1.1)
2. Total counter
3. Day counter
4. Start
5. Stop
6. Belt down
7. Belt up
8. Manual control
9. Menu
10. Exception

5.3.1.1 Alarm notifications



Faults can be retrieved by pressing the triangle with an exclamation mark. Once in this menu, current faults can be reset after they have been resolved.

5.3.1.2 Total counter

This counter shows the total number of sewing cycles that the machine has completed. The counter cannot be reset and gives a good indication when the machine requires maintenance.

5.3.1.3 Day counter

The day counter shows the number of sewing cycles that have occurred since a certain time. This counter can be reset to 0 at any time in order to monitor a quantity. Press the text *day counter* to reset the counter in the tracking screen.

5.3.1.4 Start

This button starts the machine so that it can start making the sewing cycles.

When the button is pressed, the machine will go into start/automatic mode and the button will light up green.

5.3.1.5 Stop

The stop button switches the machine out of automatic mode, after which the machine stops the cycle. The start button will change from green to orange.

5.3.1.6 Belt up

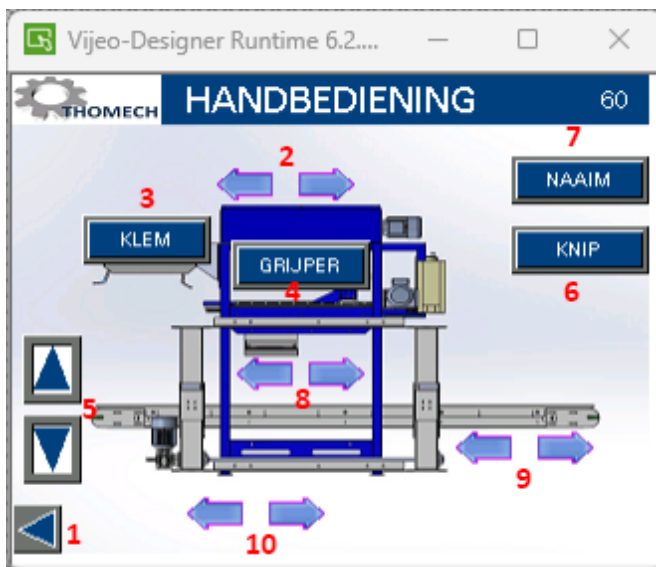
This button, together with the *belt down* button, is intended to give the sewing tape the optimal position. Press the *belt up* button to raise the sewing tape a little.

5.3.1.7 Belt down

This button, together with the *belt up* button, is intended to give the sewing tape the optimal position. Press the *belt down* button to lower the sewing tape a little.

5.3.1.8 Manual control

This function allows the machine to be operated manually if necessary. To use the manual control, the machine must first be stopped, otherwise this function is not accessible and the manual control button is marked gray. When the machine is in stop mode, the buttons can be pressed and the machine will execute the selected command.



1. Back to home screen
2. Gripper entrances and exits
3. Bags are stuck/loose
4. Grab open/close
5. Belt up/down
6. Cutter
7. Sewing machine on/off
8. Strings forward/reverse
9. Belt forward/reverse
10. Belt/strings forward/reverse synchronously

5.3.1.9 Menu

The *Menu* button allows you to adjust the machine's operating settings. After pressing the *Menu* button, the following screen will appear:



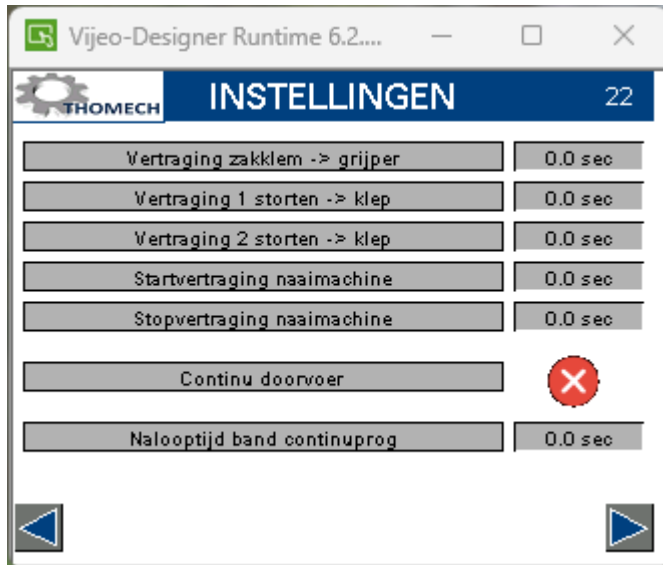
1. Settings
2. Admin
3. Inputs
4. Outputs
5. Language choices
6. Back to menu

5.3.1.9.1

5.3.1.9.2 Settings

In the settings menu (see image below), the times of reactions can be adjusted, among other things.

If the settings need to be changed, press the value of the item to be changed. A numeric keypad will then appear allowing you to enter the desired value. Then close with enter to confirm.



Bag clamp grab delay

This is the time between the gripper closing and the bag clamp releasing the bag (this allows the bag to be fed in high).

Delay 1 dump valve

This is the time until the bag is removed after the deposit has been completed (the weigher has signaled that the deposit is ready). Sometimes two signals are required for this, which is why *delay 2 dump valve*.

Delay 2 dump valve

This is the time until the bag is removed after the deposit has been completed (the weigher has signaled that the deposit is ready). Sometimes two signals are required for this, which is why there is also a *delay in 1 dump valve*.

Sewing machine start delay

This is the time to activate the sewing machine starting after the bag is detected by the sensor.

Stop sewing machine delay after sensor after sewing machine

This is the time to activate the sewing machine stop after the bag is detected by the sensor.

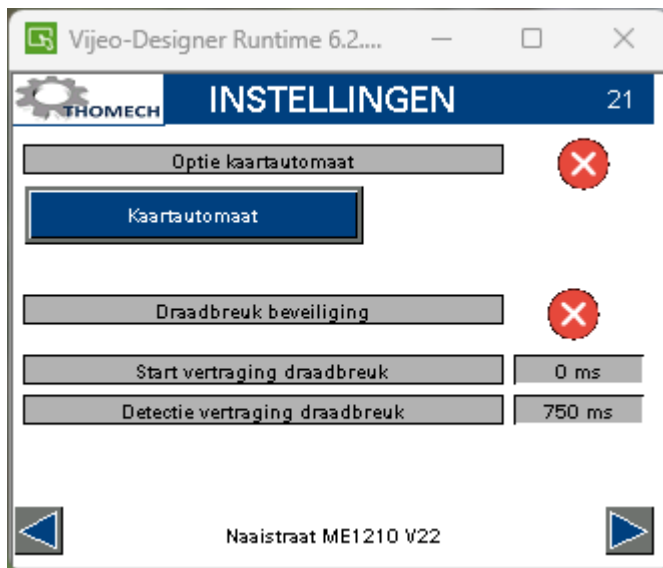
Continuous throughput

This function adjusts the sewing cycle so that the bag no longer stops at the sewing machine sensor, but immediately feeds each drained bag until it is sewn.

Run-on time for continuous throughput

This is the time the belt will continue to spin after the bag is sewn and will no longer drain.

With the arrows left and right at the bottom of the screen you can switch to the next/previous page for more settings:

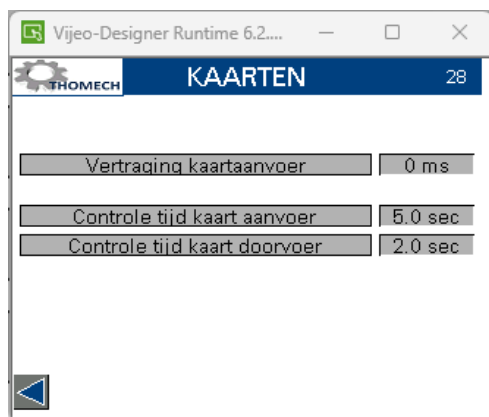


Ticket machine option

The ticket machine can be switched on and off with this button.

Ticket machine

After pressing this button, the ticket machine menu will follow (see image below).



Delay in card supply

This is the time it takes for the card to be positioned on the bag. When the sewing machine starts running, the card machine receives a signal to issue the card. This time allows the signal to the ticket machine to be delayed.

Check time card supply

This is a control time when a new card must be placed in front of the card sensor, otherwise the card machine will malfunction and a message will follow that no card is ready for the next bag.

Control time card transit

This is a control time when the card must have left the card sensor, otherwise the card machine will malfunction and a message will follow that no card has been issued.

Wire break protection

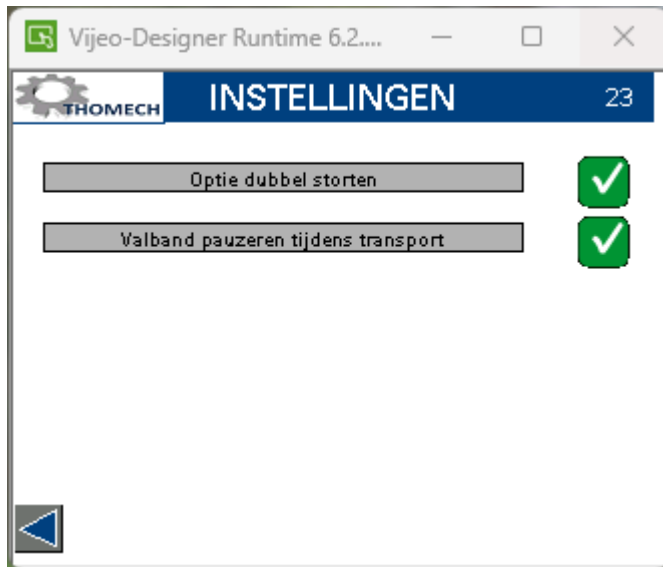
With this button you can switch the wire break protection on or off.

Start delay wire breakage

This is the time that the sewing machine will start and thread break detection will begin. The sewing machine is started first and only then is it detected.

Wire break detection delay

This is the time the sensors have to arrive at a stable signal. If the sensor fails after the set time, the machine will go into a wire break alarm.



Double deposit option

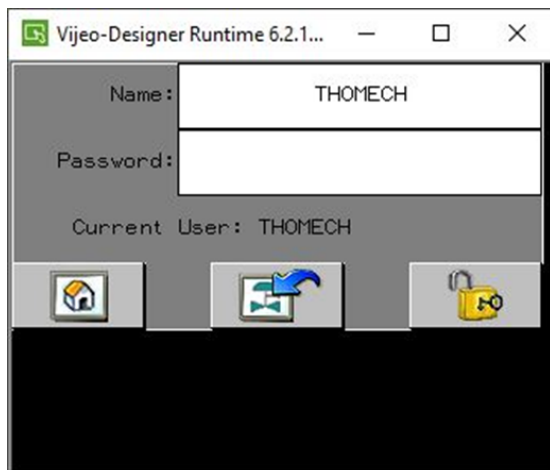
The machine will want to receive a dump signal from the weigher twice before the bag is removed from under the clamp (this may be necessary for some weighers if you want to discharge 50 kg).

Pause the fall belt during transport

This turns the drop belt on or off so that it rotates together with the sewing belt. This ensures that a 50 kg bag falls smoothly onto the fall belt (*fall belt pause on*). More capacity can be achieved with a 25 kg bag (*pause fall belt off*).

5.3.1.9.3 Admin

This function concerns some important settings for the operation of the machine. Access to the *admin* requires a username and password and is only available to authorized users.



To access the Admin, after entering the username (*Name*) and password (*Password*) - press the lock and then press the blue arrow. The admin screen below will appear:



The values can be changed by pressing the speeds.

Sewing belt speed

Increase or decrease the speed of the sewing belt.

Speed strings

Increase or decrease the speed of the input strings.

Speed grab forward

Increase or decrease the speed at which the gripper advances.

Speed grab to the back

Increase or decrease the speed at which the gripper moves backwards.

Bag clamp, clamp time

The waiting time for the gripper to move forward after the signal (push button for clamping the bag) has been given.

Grab clamp time

The waiting time the gripper has to clamp the bag before the cycle continues.

Start delay flash

The delay time of cutting after stopping the sewing machine.

Cutter pulse

The time that the cutter is activated (and the cutter is off).

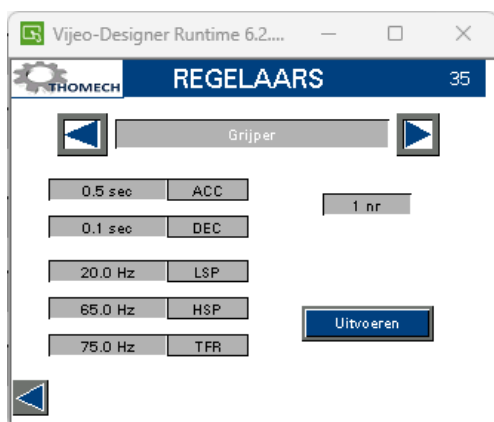
With the arrows left and right at the bottom of the screen you can switch to the next/previous page for more settings:



Regulators

The menu of the controller is shown below.

! Note op: Before adjusting, check whether the correct controller is at the top of the screen (*gripper, strings or strap*).



The arrows at the top are for switching from *gripper* to *strings* or *sewing tape*.

Click on the values to change, confirm the desired value with enter.

ACC - Acceleration time (acceleration speed in sec.)

DEC - Deceleration time (deceleration speed in sec.)

LSP - Lowest speed controller

HSP - Highest speed controller

TFR - Absolute speed controller (value must be higher than 5)

To carry out

This is the confirmation key to confirm the entered value.

Mirrored machine

Choose left or right version.

Bag entry to sensor

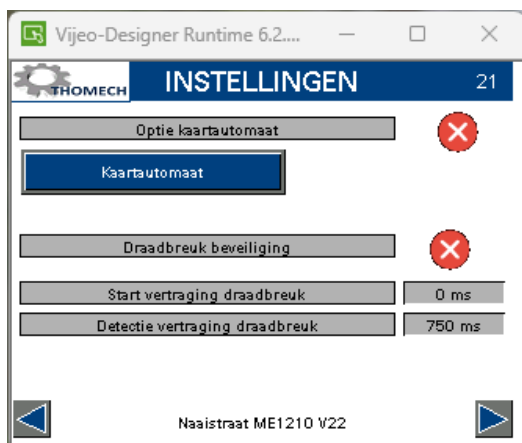
You can choose not to have the bag stop at the sensor, but to have it entered into the bag at a set time. This allows greater capacity to be achieved if desired. With this choice, the minimum input time must be set to the correct time.

Minimum entry time

The time the bag is fed when the *bag feed to sensor option* is not activated.

Rear map sensor

The option to work with different card sizes. If this option is checked, another card menu will appear in the settings, the details of which must be filled in (see image below).



When clicking on *ticket machine*, the following menu appears:



Different settings can be created here for any desired map. Click on the number to activate the relevant map menu, which will light up red.

Click on the text to enter a name and adjust the data of the relevant card (see image below).



Delay in card supply

This is the time it takes for the card to be positioned on the bag. When the sewing machine starts running, the card machine receives a signal to issue the card. This time allows the signal to the ticket machine to be delayed.

Run time cards freely

De The time that the card machine continues to run after the card has been seen by the sensor, to ensure that the perforation is in the middle of the two rollers and then torn.

Tear up time cards

The time that the cylinder is off to press the roller onto the ticket machine and tear the cards, after which it is withdrawn again.

Carry out time cards

The time the card is allowed to pass through to position it as a starting position, after which the bag is moved through.

Check time card supply

This is a control time when a new card must be placed in front of the card sensor, otherwise the card machine will malfunction and a message will follow that no card is ready for the next bag.

Control time card transit

This is a control time when the card must have left the card sensor, otherwise the card machine will malfunction and a message will follow that no card has been issued.

With the arrows left and right at the bottom of the screen you can switch to the next/previous page for more settings:



The above screen activates communication signals to test the machine without the need for external machines.

Signal -> dump weigher 1

A signal is given that the weigher may start dumping.

Signal -> dump weigher 2

A signal is given that the weigher may start dumping.

Scale 1 by weight

A signal is given that the weigher has reached its weight, this signal normally comes from the weigher.

Weigher dumped

The signal that the weigher has deposited, this signal normally comes from the weigher.

5.3.1.9.4 Inputs

Observing whether all signals that go to the PLC (from sensors, sensors and screens, etc.) actually arrive.



This button displays the above screen on which a green button lights up when a signal arrives. This way you can see (with telephone support) where any problems are occurring.

Use the arrow keys on the right to scroll through the list to view each entry.

With the arrow keys at the bottom you can choose between the basic menu or the expansion card.

The bottom left arrow key returns to the previous screen.

5.3.1.9.5 Exits

Check whether all signals that the PLC sends are actually controlled.



This button displays the above screen on which a green button lights up when a signal arrives. This way you can see (with telephone support) where any problems are occurring.

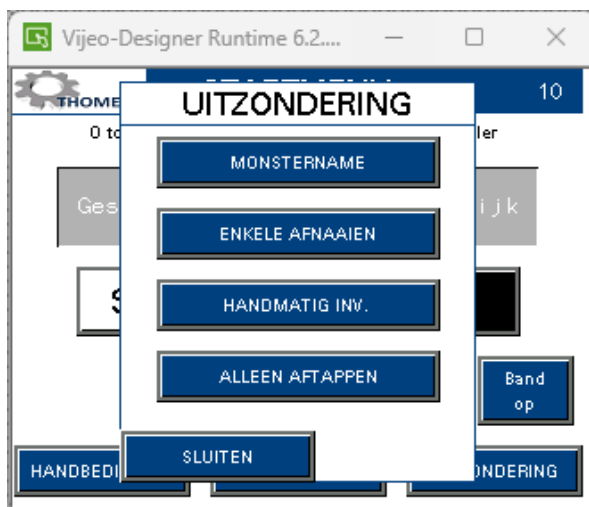
Use the arrow keys on the right to scroll through the list to view each entry.

With the arrow keys at the bottom you can choose between the basic menu or the expansion card.

The bottom left arrow key returns to the previous screen.

Exception

The *exception* button is for performing deviating actions. Three different actions appear on the screen that the machine can perform in the automatic mode. Make sure the machine is in automatic mode (start) before performing these functions:



1. Sampling
2. Sew some stitches
3. Enter manually
4. Drain only

5.3.1.9.6 Sampling

This function allows you to drain a bag from the weigher, but not yet sew it closed. So that, for example, an inspector can still inspect the product in the bag.

When activated, the bag will be filled after hanging, but will not be fed into the machine. The bag remains under the jaw so that the bag can be removed manually from the sewing belt.

5.3.1.9.7 Single sewing

This function is used to empty the machine when the product has run out and there are no more new bags containing the product. When this button is activated, the last bag still in the machine will be sewn and discarded. The machine will therefore run empty.

5.3.1.9.8 Enter manually

This function allows you to manually insert loose bags that have not yet been sewn shut so that they can be sewn closed by the machine.

When this button is activated, the feed strings and the sewing belt will start to rotate. A bag can then be manually inserted between the input strings, which is then taken over by the machine.

5.3.1.9.9 Drain only

This function allows you to drain without the gripper coming forward to take over the bag and feed it into the strings. This allows the weigher to empty or drain small quantities without sewing.

6 MAINTENANCE AND REPAIR

6.1 GENERAL

Perform maintenance more often if necessary, for example due to intensive use. Report any malfunctions and defects to the technical service. If in doubt, do not switch on the machine. If possible, switch off the machine during maintenance.

Also consult the electrical diagrams for repairs and malfunctions

The machine will only function optimally if the indicated maintenance schedules are followed. The maintenance moments must be demonstrable by means of a registration. If it appears that the prescribed maintenance has not been carried out, the supplier cannot be held liable for damage.

Repair of the drive

Always remove the products during drive repairs. Always support the axles properly before carrying out any work on the drive. This prevents unexpected and unintended movements.

G	Attention!
	Read the safety instructions before you start cleaning and maintaining the machine.

6.2 DAILY MAINTENANCE

At your own discretion and use of the machine, it may be necessary to add maintenance work. Add or edit this information in the table below.

1	Whole machine	Check the machine for proper operation.
2	Whole machine	Check for additional noise or vibration.
3	Whole machine	Check for leaks and any other defects and damage.
4	Whole machine	Perform a visual inspection of the entire machine. If in doubt, switch off the machine and contact the manufacturer.
5	Whole machine	Clean the machine if necessary.
6	Whole machine	Blow off with compressed air, especially between the drive belts and sewing machine to remove jute.
7		
8		
9		
10		

6.3 PERIODIC MAINTENANCE

At your own discretion and use of the machine, it may be necessary to add maintenance work. Add or edit this information in the table below. If desired, conclude a maintenance contract with the manufacturer. Preventive maintenance largely prevents unforeseen downtime.

1	Whole machine	<ul style="list-style-type: none"> ▪ Check the Machine for proper operation. ▪ Check for additional noise or vibration. ▪ Check for leaks and any other defects and damage. ▪ Visually check parts and replace if necessary damaged parts. Clean the machine of all dirt and grime. ▪ Perform a visual inspection of the entire machine. If in doubt, turn off the machine and contact the manufacturer.
2	Safety features	Check the operation of all safety functions.
3	Electrical installation	Perform an annual NEN 3140 (or NEN EN 50110) inspection on the machine.
4	Parts with lubrication options	Check parts with lubrication capabilities, including transmission and bearings. Depending on leakage and/or condition of the grease, lubricate. In principle this will not be necessary.
5		
6		
7		
8		
9		
10		

Actie	Interval	Opmerking
Lubricate linear bearings gripper	5000 bags	Two pumps of grease per side
Sewing machine oil level	Daily	Oil must be between the two lines in the sight glass
Cleaning the sewing machine	Daily	Clean the sewing machine with compressed air
Lubricate the drive rod of the cutter	Weekly	Lubricate bearing bushes with Teflon spray
Cleaning the machine from dirt and soil	Weekly	Clean with compressed air or broom
Check the sewing tape for straightness	Daily	If the belt does not run straight, adjust it
Check input strings for correct tension	Weekly	If this is not the case, tighten it

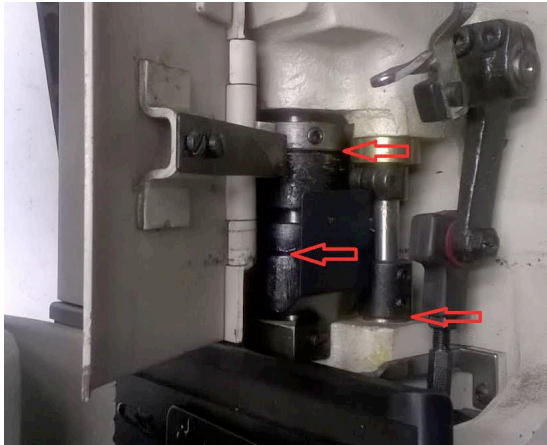
6.3.1 Sewing machine maintenance

Change oil

Changing the oil of the sewing machine is a standard procedure when the sewing machine is periodically submitted for maintenance [Meindertsmas zakkennaaimachines](#). Check daily whether the oil level of the machines is at the prescribed level. There are two oil sight glasses on the machine. Be extra alert to this when oil stains appear under the sewing machine (or on the underband)

Lubricate eccentrics outside an oil bath

To get the oil into the right place, it is advisable to use a lubricating can with a spout. Spray a little oil daily on the areas indicated by the red arrows in the image below.



Lubricate/change oil Frequency (with full-time use)


Sewing machine oil pan	1x per year	Sewing machine oil food grade HMG 32
Rotating parts outside the oil bath	Every workday	Orapi 565 food grade or chain oil Ditiol 2810

7 CLEANING

When cleaning the machine, the following must be observed:

- Disconnect the machine from power.
- Remove the product(s) from the machine before starting cleaning.
- Clean the machine with cleaning agents and methods that are common/known in the food industry and that are specifically applicable to the use and purpose of this machine. The cleaning agent must have a PH value between 7 and 12.


If a high-pressure washer is used for cleaning, it is not permitted to aim directly at: cylinders, chains, hoses, cables, motors, connections, switch cabinets, service switches, etc. This can cause damage to the machine, which can have consequences. for the functioning and safety of the machine.

	WARNING!
Never point the high-pressure washer at critical parts of the machine.	

8 FAILURES

Although the machine has been designed and constructed with the utmost care, malfunctions may occur. The overview below shows possible malfunctions and how they can be resolved. Report structural faults to the supplier. This helps us improve future generation machines.

G	ATTENTION!
	Read the safety instructions before you start troubleshooting.

	WARNING!
	Only qualified personnel may carry out work on the electrical and hydraulic system.

G	ATTENTIE!
	In case of damage or malfunction, do not repair the device yourself. Contact the technical service or the manufacturer.

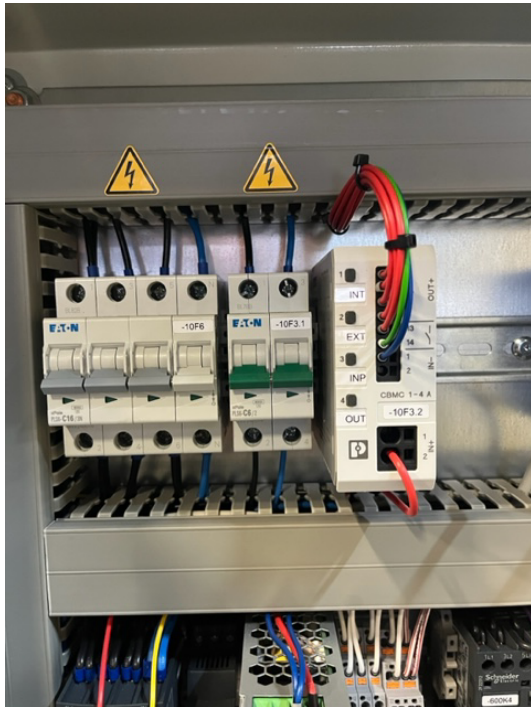
8.1 POSSIBLE MALFUNCTIONS AND SOLUTIONS

Storing	Oorzaak	Actie
The touch panel does not light up	Machine is off	Turn on the main switch
	There is no power at the wall socket to which the machine is connected	Check the voltage on the toilet
	The control voltage is defective	Call your supplier to resolve the fault
Machine does not start	The machine is not controlled from the higher-level installation	Check the control from the higher-level installation
	The start button does not work	Call your supplier to resolve the fault
	There is no power at the wall socket to which the machine is connected	Check the voltage on the toilet
The machine will not run	Wait for release of palletizer or weigher or ticket machine.	Check whether the releases are present (on PLC in control cabinet)
		Call your supplier to resolve the fault
Push button bag clamp does not work	Machine is not in start mode	Press start button
The machine has started but is waiting for the weigher	Check whether the weigher is turned on and check the supply of product	Start weigher
The bag is filled but remains stuck under the bag	Check whether the weighing machine container is empty. Check whether the palletizer is ready and whether wire breakage or card failure	Remove any remaining product from the weigher so that the weighing bin is empty. Turn on palletizer and resolve wire break or card jam
The bag is not closed	Check for broken wires	Reinsert the thread into the sewing machine

The wire is broken but the machine does not malfunction	Check whether the wire break message is on in the display	Turn on wire break detectors
The thread is not cut properly	Check whether the blades are still sharp	Replace blades
Cards are not torn off properly	Check whether the first roll is pressed properly / check the air pressure (between 4-6 bar)	Increase the air pressure if it is below 4 bar

8.2 OVERLOAD

If a fuse has blown, follow the instructions below:



(circuit breakers)

8.2.1 Overload in the main circuit

If a problem occurs in the main circuit that leads to a short circuit or overload, circuit breaker 10F6 or 10F3.1 will trip and become inactive.

Check whether there are optical disturbances in the cabling and whether the motors are overheated; if so, consult a certified technician.

If this is not the case, the circuit breaker can be set to active again to see whether this was a one-off fault or whether a certified technician needs to solve the fault.

8.2.2 Overload in the control circuit

If a problem occurs in the control circuit that leads to a short circuit or overload, the indicator LEDs on circuit breaker 10F3.2 will light red and become inactive.

Check whether there are optical disturbances in the cabling; if so, consult a certified technician.

If this is not the case, the circuit breaker can be set to active again by pressing the relevant LED to see whether this was a one-off fault or whether an authorized technician needs to solve the fault.

Restart the machine. If the fuse blows again, the cause must be determined and, if possible, the problem must be resolved. If this does not work, contact a qualified expert.

9 DECLARATION OF DOCUMENTS RECEIVED

- The undersigned hereby declare that they have received the following documents and have the opportunity to read and understand them:
Instruction Manual NS10-50HA

These documents describe how the machine should be used in a safe and responsible manner, provided that safety standards are adhered to.

The company Thomech BV has tried to remove all possible unsafe situations. If an accident occurs unexpectedly, Thomech BV is not responsible for any damage or injury resulting from the use of the machine. Any expenses or reimbursements cannot be recovered.

Date: City:

Name: Signature:



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