



MAYER POTTING MACHINE 1018 CE

Date of issue: 01.01.2010 / V1.3

This document shall be read prior to putting into operation of the machine, and shall be kept on the machine for future use.

EC DECLARATION OF CONFORMITY

in accordance with Annex II A of the EC Machinery Directive (2006/42/EC)

The manufacturer:

Mayer GmbH & Co. KG
Maschinenbau u. Verwaltung
Poststr. 30
89522 Heidenheim | Germany

herewith declares that the following described machine:

Make: Mayer
Type: Potting machine
Series: 1018
Year of manufacture: after 2008

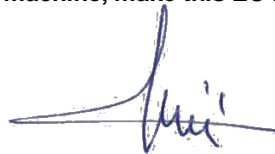
complies with the relevant safety and health requirements of the following EC Machinery Directive:

2006/42/EC

References to the relevant harmonised standards used:

	Safety of machinery. Basic concepts, general principles for design
Part 1 EN ISO 12100-1	Part 1: Basic terminology, methodology
Part 2 EN ISO 12100-2	Part 2: Technical principles and specifications
EN ISO 13857	Safety distances to prevent hazard zones being reached by upper limbs
ISO 13854	Safety of machinery. Minimum gaps to avoid crushing of parts of the human body
EN ISO 13849-1	Safety-related parts of control systems Part 1: General principles for design
EN ISO 14121	Risk assessment. Principles.
ISO 14119	Interlocking devices associated with guards
ISO 13850	Emergency stop. Devices
IEC 60204-1	Electrical equipment on industrial machines. Part 1: General requirements

Constructive modifications that may have effects on technical data and intended use as given in this instruction of use, i. e. that significantly modify the machine, make this EC Declaration of Conformity invalid!



Dated in Heidenheim, on 01.01.2010

.....
 Dipl.-Ing. (TU) Arpad G. Meszaros
 Head of Development and Construction

TABLE OF CONTENT

- 1.0 Technical data**
- 2.0 Data for the use of the machine**
 - 2.1 Scope of use
 - 2.2 Irregular use
 - 2.3 Function of the machine (operation principle)
- 3.0 Transportation, handling and storage of the machine**
 - 3.1 Transportation
 - 3.2 Handling
 - 3.3 Storage
- 4.0 Instructions for assembly on operational location**
 - 4.1 General instructions
 - 4.2 Installation of the machine
 - 4.3 Provisions for the stability of the machine
 - 4.4 Dismantling and disposal of the machine
- 5.0 Putting into operation**
 - 5.1 General instructions
 - 5.2 Starting the machine
 - 5.3 Stopping the machine
- 6.0 Working with the machine**
 - 6.1 Normal operation
 - 6.2 Shutdown of the machine
 - 6.3 Provisions before and after longer shutdowns
- 7.0 Work safety instructions**
 - 7.1 General work safety instructions
 - 7.2 Machine-related work safety instructions
- 8.0 Failures**
 - 8.1 Behaviour in case of failures
 - 8.2 Possible failures and their correction
- 9.0 Maintenance**
 - 9.1 General instructions
 - 9.2 Maintenance works on the machine
 - 9.3 Representatives and service stations
- 10.0 Electrical switching plans**
 - 10.1 Electrical switching plans
- 11.0 Guarantee**

1.0 TECHNICAL DATA

Type of machine:	1018
No. of machine:	
Length:	300 cm
Width:	200 cm
Height:	200 cm
Weight:	700 kg
Electrical connection:	400 V / 50 Hz, 5-pole
Power consumption:	3,2 kW
Pot volume:	up to max. 400 litres
Volume of soil container:	1,5 m ³
with soil attachment (straight):	2,5 m ³
with soil attachment (bevelled):	2,7 m ³
Working place related emission value:	73 dB(A)

2.0 DATA FOR THE USE OF THE MACHINE

2.1 SCOPE OF USE

Great pots, vessels or containers, as well as plastic foil-bags can be filled up with soil with this MAYER GREAT CONTAINER FILLING POTTING MACHINE.

2.2 IRREGULAR USE

Other application purposes than those detailed in the capitals "Scope of use" and "Work with the machine" are not allowed, and make the manufacturer free of any responsibility.

2.3 FUNCTION OF THE MACHINE (OPERATION PRINCIPLE)

The machine consists of a soil container, an elevator and a transport trough for the substrate.

Instead of bottom, there is a rubber band mounted on the soil container to transport the substrate forwards. Thereby the soil can fall through a rhythmical movement into the elevator.

There are two chains with buckets in which soil is then upwards transported.

The soil mass transported up this way is tilted into a trough made of metal plate, and two worms moving in contrary to each other, to the left and to the right, deliver and distribute the substrate.

In front of the machine, on the left and the right side to the elevator, two turntables are positioned. The empty containers are placed onto the two turntables and are filled up with soil from the transport trough with the help of two soil slides. In order to make filling up easier and better the turntables can be rotated up to 360°.

The filled containers are manually taken away from the machine, and the new empty containers are manually placed onto the turntables, as well.

3.0 TRANSPORTATION, HANDLING AND STORAGE OF THE MACHINE

3.1 TRANSPORTATION

When transporting the machine, it is extremely important to take care in order to avoid any damage caused by use of excess force or imprudent loading and disloading.

Depending on kind and length of time of transport, proper transportation safety regulations must be taken into account.

During transportation, condensing of water because of great change in temperature, and bumps must be avoided.

The machine itself must be treated in a normal careful way.

3.2 HANDLING

The potting machine is equipped with 2 air-tires, and placed onto an axle on the front and 2 feet on the soil vessel. The weight of the empty machine is counterbalanced on the axle. The transport handlers can be hinged thereby the machine can be moved just like a trolley – pushed or pulled. When desired a trailer coupling can also be mounted against extra price.

When moving the machine special care must be taken to the cables in order to avoid any accidental overrun of the front wheels on the cables causing damage or tear off.

When the machine is transported on a bevelled, aslope surface the following instructions must be followed:

- the soil vessels must be fully emptied;
- satisfactory safety measures must be taken in order to avoid an uncontrolled rolling away of the machine.

Such satisfactory measures are e. g.:

- proper number of workers;
- locking the wheels with wheel chock;
- etc.



3.3 STORAGE

If the machine or machine construction units should not immediately be installed after delivery so they must be carefully stored on a protected place. In this case they must be properly covered to prevent dust or moisture penetration.

For shutting down the machine see Chapter 6.3.

4.0 INSTRUCTIONS FOR ASSEMBLY ON OPERATIONAL LOCATION

4.1 GENERAL INSTRUCTIONS

a)

In order to protect the machine against the influences of the weather it must be installed in a closed room.

b)

Electrical connection: 400 V / 50 Hz.

Connection to power sockets is only allowed if the socket outlet is protected by a 0.03 A residual current circuit breaker (RCCB).

c)

It is important to provide enough place for the filling and loading operations. Other machines located upstream or downstream must thereby be correspondingly arranged.

4.2 INSTALLATION OF THE MACHINE

a)

The ground of the machine should be even and firm so that the wheels and feet of the machine could not sink into it.



4.3 PROVISIONS FOR THE STABILITY OF THE MACHINE

No measures other than those listed in Chapter 4.2 are necessary for the stability of the machine.

4.4 DISMANTLING AND DISPOSAL OF THE MACHINE

After the full lifetime of the machine is over it must regularly be separated from the electric supply system, and must be disposed in accordance with the actual valid legal regulations.

5.0 PUTTING INTO OPERATION

5.1 GENERAL INSTRUCTIONS

Prior to putting the machine into operation the following must be checked:

- whether all the protective devices and equipment exist;
- whether the machine had damage during transportation;
- all the visible screw connections must be checked for stable and firm seat;
- prior to putting the machine into operation all the electric connection cables to the machine and the cable to the emergency stop switch must be controlled for damage.

5.2 STARTING THE MACHINE

After installation the machine must be tested in the following way:

a)

It must be checked that no foreign things such as tool boxes or similar can be found in the soil vessel, in the elevator or on the turntable.

b)

Before connecting the machine electric cable to the power supply first the main switch must be placed into "0" (OUT) position on the electric cabinet.

c)

After the electric connection works between the electrical supply system and the machine the main switch must be placed into "1" (IN) position.

d)

It must be taken into account:

In case of reversing switch "Soil" means:

- Turning the switch to the right, into position "1" > smaller amount of soil;
- turning the switch to the left, into position "2" > greater amount of soil.

CAUTION!

- Switch position to the right means: the elevator and the conveyor move in working direction;
- Switch position to the left means: the elevator moves against working direction but the conveyor moves in working direction!

e)

If there happened no irregularities such as extraordinary noises during trial operation so the machine can be operated in the way described in Chapter "Working with the machine".

5.3 STOPPING THE MACHINE

The machine can be stopped in 2 ways:

a)

In normal case the machine can be stopped with the use of the stop button "STOP".

b)

In alarm situation the machine can be stopped and switched off with the use of the emergency stop switch "Emergency stop".

Remark:

See also: Chapter 6.2 – "Shutdown of the machine".

6.0 WORKING WITH THE MACHINE

6.1 NORMAL OPERATION

a)

The machine is filled with soil.

b)

The turntable is positioned under the soil slide and the height is set.

c)

The great container, the vessels or the sacks are prepared.

d)

The 2 foot switches are installed to the right and to the left from the elevator.

e)

After switching the main switch on, when operating the foot switches, the machine starts working and fills the container with soil. The soil feeding runs so long till the foot switch remains in operation.

f)

Controlling the amount of soil:

The delivery of the soil from the soil container to the elevator takes place with the help of an endless rubber band that runs on carrier rollers in the soil container.

There are 3 possibilities for controlling the amount of soil to be delivered:

I.

With the different switching positions on the switch of the elevator and the rubber band:

- Turning the switch to the right, into position "1" > smaller amount of soil;
- turning the switch to the left, into position "2" > greater amount of soil.

CAUTION!

- **Switch position to the right means: the elevator and the conveyor move in working direction;**
- **Switch position to the left means: the elevator moves against working direction but the conveyor moves in working direction!**

II.

With the help of the star handle, in accordance with the symbols, the feed rate of the conveyor can be increased or decreased.

Before setting this the cross handle must be loosened and after the required setting it must be re-tightened.

The elevator buckets running always with the same speed shall then deliver upwards more or less amount of soil.

In case of fine controlling of the amount of soil the star handle is to be turned only one or two turns each time after which about 40-50 seconds time must be waited. Further corrections are only allowed after expiry of this period.



III.

For doubling of buckets number in the elevator > against extra price.

NOTE:

Please take care that only the exactly required amount of soil be filled in. Thereby the elevator drive is relieved which results in longer life time.

6.2 SHUTDOWN OF THE MACHINE

The machine can be shut down in 2 ways:

a)

In normal case the machine can be controlled with the use of the foot switches. The machine is then running so long till the foot switch is operated.

b)

In alarm situation the machine can be switched off with the use of the emergency stop switch "**Emergency stop**". When this emergency stop button is pressed the machine stops immediately.

After unlocking the emergency stop button the foot switch "Start" must be pressed to restart the machine.

6.3 PROVISIONS BEFORE AND AFTER LONGER SHUTDOWNS

a)

Before longer shutdown

- The machine must carefully be cleaned.
- All the parts of the machine must be oiled and greased in accordance with the maintenance plan.
- The machine must be protected against any dirt and moisture (covering).
- The machine must be separated from the actual energy supply systems (electrical energy and compressed air).

b)

After longer shutdown

- All parts of the machine must be oiled and greased in accordance with the maintenance plan.
- The machine must be visually checked.
- The machine must be connected to the actual energy supply systems.
- The machine can be started as described in Chapter "Putting into operation".

7.0 WORK SAFETY INSTRUCTIONS

7.1 GENERAL WORK SAFETY INSTRUCTIONS

Our machines are constructed in accordance with the actual state of technical art, and are safe to operate. However, there may arise certain dangers if they are irregularly operated by unqualified persons, or they are not applied under normal conditions of use.

Each person who deals with installation, mounting and de-mounting, putting into operation, operation and maintenance in the factory the user must read and understand the complete Instruction of Use, especially the Chapter "Work safety instructions".

The machine can only be operated, maintained and serviced by authorized, qualified and properly instructed persons.

It is forbidden to apply any way of working that may have influence on the safety of the machine and the persons.

The user is obliged to operate the machine always only in perfect condition.

It is not allowed to fulfil any unauthorized modifications and changes that may have influence on the safety of the machine.

Any activities on the machine can basically only be done when the machine is shut down state.

Before starting any work on the machine the drive and the accessories must be safeguarded against unintentional activation.

Before starting the machine after servicing have been finished it must be checked whether all the safety equipment and devices are mounted.

Safety equipment and devices can only be removed if the machine is stopped.

For operating the machine all the local safety and accident prevention regulations must be followed in all cases.

The machine is not allowed to operate if safety and protection equipment and devices are removed.

The operator is responsible for all other persons in the work area.

If any of the aforementioned points are not observes the manufacturer shall be free against any responsibility.

7.2 MACHINE-RELATED WORK SAFETY INSTRUCTIONS

The work places are divided into different areas on the potting machine.

a)

Putting the vessel onto the turntables.

b)

Filling up the soil vessel with substrate from the backside, or from the right side or from the left side.

c)

The responsibilities for different activities on the machine must be clearly determined and kept.

Unclear competencies represent safety risk.

Basically it must be taken into consideration that tight working cloths must be worn at all work places.

Wearing of chains, rings or bracelets is forbidden.

For work-technical reasons it is not possible to cover the soil vessel totally. In spite of that the cover mounted provides certain protection against eventually running out of the elevator chains.

However, it is forbidden to grip into the soil vessel (e.g. for more soil to push into) for there is the danger in this case that the elevator chains or the buckets on the elevator catch.

It is also forbidden to get into the soil vessel when the machine operates.

It is forbidden to grip into the running machine in case of failures during the work process for eliminating the failure.

The emergency stop switch must all the time be in close reach.

It is forbidden to stand onto the running, working machine.

The machine must be stable installed onto even and firm ground. An overturning machine means life danger.

The ground (at the work places on the machine and the traffic ways) must regularly be cleaned from dirt and standing water in order to avoid danger of slipping.

Tripping caused by cables connected to the energy supply systems must be avoided.

All cables to the machine must be protected against damage.

To work on the electrical accessories and parts of the machine is only allowed for qualified electrical expert.

The safety and protection equipment and devices

- are in interest of the operators' safety installed;
- shall under no circumstances modified, removed or bypassed owing to changes on the machine.

8.0 FAILURES

8.1 BEHAVIOUR IN CASE OF FAILURES

If failures occur on the machine during operation the following must be followed:

a)

The machine must be stopped or shut down either through the foot switch, the main switch or the emergency switch, depending on the case.

b)

If it is necessary for the safety of persons or of the machine, the machine must be immediately separated from the actual energy supply systems.

c)

Search for failure or trouble > if necessary, only by qualified persons.

d)

Troubleshooting > if necessary, only by qualified persons.

e)

Starting of the machine.

8.2 POSSIBLE FAILURES AND THEIR CORRECTION

a)

Mechanical failures or troubles

Symptom	Reason	Measure
Abnormal noises in the elevator.	Stone or wood jammed.	Remove the reason of the trouble. Maybe the elevator should run backwards (switch to the left into position "1" or "2").

b)

Electrical failures or troubles

Motor protection switch activated.	Failure in the electrical equipment.	Check the electrical equipment by a qualified person.
	Mechanical overloading occurred.	Remove any eventually occurred foreign body.

9.0 MAINTENANCE

9.1 GENERAL INSTRUCTIONS

The machine must be fully cleaned after any use.

The lubrication specification given in the operation instructions must be exactly observed.

Please provide a written order to our Customer Service for inspection your machine one or two times a year.

Through a travel route practically planned by us to more customers you can enjoy significantly less costs and your machine should be really professionally inspected.

Our Customer Service Department is also at your disposal in our factory during business hours from 8.00 o'clock till 16.00 o'clock.

**MAYER GmbH & Co.
Maschinenbau u. Verwaltung
Poststr. 30
D-89522 Heidenheim**

**Phone 00 49 (0)7321/9594-233
Telefax 00 49 (0)7321/9594-297**

9.2 MAINTENANCE WORKS ON THE MACHINE

- Elevator chains

Re-tightening of the elevator chains can be made with the use of a tensioning bearing situated to the left and right on the elevator.

Tightening of the elevator chains must regularly be checked. If the tension is too low the elevator buckets on the terminal block can clasp in the elevator.

Too strong tightened chains need unnecessary high power from the drive and are subject to increased wear.

Re-tightening must be applied equally on both chains. The tension is considered normal if the chain can be manually moved about 3-4 cm at the height of the vessel holder.



- Transport band from rubber

NOTE: THE RUBBER TRANSPORT BAND NEEDS GENERALLY NO RE-TIGHTENING.

If it is necessary to set, regulate the rubber transport band, e. g. after repair works on the machine, this must be done in the following way:

The tension of the rubber transport band can be regulated with the help of the flange nuts to be found on the rear side of the soil vessel. It is extremely important the uniform re-tightening in order to avoid one-side running of the band.

Beside it, extraordinarily care must be taken that the groove of the driving and guide pulleys not be full with the substrate. From time to time the grooves must be cleaned.



- Elevator chains (before longer shutdown) should be greased.

9.3 MAYER SERVICE WORKSHOPS IN GERMANY

<p>Mayer GmbH & Co. KG Maschinenbau u. Verwaltung Service Poststr. 30 89522 Heidenheim Tel. 07321/9594-238 (Service) Tel. 07321/9594-233 (Spare parts) Fax 07321/9594-297</p>	<p>Mayer Kundencenter Ost Vertriebsgesellschaft für Gartenbautechnik Auerbach Ltd. Mendelssohnstrasse 3 04442 Zwenkau Tel. 034203/62302 Fax 034203/62303</p>
<p>Mayer Kundencenter West Mayer Service Zeppelinstr. 19 47638 Straelen Tel. 0151/12149804 Fax 02834/708075</p>	<p>Mayer Kundencenter Nord Klarmann Bewässerungstechnik GmbH Westersteder Straße 89 26655 Westerstede Hotline: 04409/908425 Tel. 04409/97170 Fax 04409/971717</p>
	<p>Seippel Landmaschinen GmbH Warthweg 8-10 64823 Groß-Umstadt Tel. 06078/93250 Fax 06078/932521</p>

10.0 ELECTRICAL SWITCHING PLANS

11.0 GUARANTEE

GARDENING MACHINERY AND SPECIAL MACHINES

For deficiencies in delivery and in case of lack of expressly guaranteed features we take guarantee under exclusion of any further demands in such a way that we free of charge repair or deliver (according to our choice) all the parts that should have been unusable owing to discrepancies in material, manufacture or design, or the use of it does not seem insignificantly influenced, within 12 months (in case of multi-shift operation: within 6 months) from the date of receipt by the purchaser. For parts that we ourselves do not manufacture (e. g. engines) we take responsibilities only to the extent and to the period we receive those from the sub-suppliers.

Parts that have been exchanged in such a way shall remain in our property, and our guarantee liability shall not be binding if the failure occurred is in causal relationship with the fact that the purchaser had treated the products supplied by us in faulty or careless way, used those in excessive stress, or executed itself or let by third party executed the realised modifications or maintenance works incorrectly or without our prior consent.

The right of the purchaser to assert claims against deficiencies shall be time-barred in each case within 6 months from the date of the notifying the defect in due time but no sooner than after expiry of the warranty. We are not obliged to remedy defects if the purchaser's obligations against us due before getting known of the defects are not complied.

CONSTRUCTION FORM MODIFICATIONS FOR GARDENING MACHINERY AND EQUIPMENTS

We reserve the right for changes in design and form, particularly deviations from the drawings, descriptions, etc. during the delivery period provided that the object of purchase is not substantially changed, it brings no deterioration or impairment with and the changes are reasonable to the purchaser.

You have decided to buy a real quality product.

We wish you lots of success with it.

We hope you should command us further.

Thank you very much.

YOUR MAYER-TEAM