

ADVANCE

Easy Moving 

27

ASSEMBLY, USE AND MAINTENANCE MANUAL

Motorized Tank

M-TANK





INSTRUCTION MANUAL

- Type: Motorized Tank
- Revision 1.0.1

MAGAZZINO MOTORIZZATO INDEX

1	INTRODUCTION	4
	1.1 Use of this manual	4
2	WARNINGS	4
3	TECHNICAL DATA AND DIMENSIONS	5
	3.1 Identification plate	6
	3.2 Safety symbols	6
4	PACKAGING CONTENT	7
5	INSTALLER'S RESPONSIBILITIES	7
6	PROPER USE OF THE PRODUCT	7
7	INSTALLATION	8
8	PIPES CONNECTION	8
9	ELECTRICAL CONNECTION	9
10	START UP AND USE	9
	10.1 Minimum level sensor calibration	10
	10.2 Operational safety	10
11	MAINTENANCE AND END-OF-LIFE	11
	11.1 End-of-life	11
12	SAFETY REQUIREMENTS FOR FUEL STORAGE TANKS	12
13	WARRANTY	13
14	CERTIFICATION	14

1 INTRODUCTION

Dear customer,
the manufacturer would firstly like to thank you for the choice you made in buying an our product, whose technical features will certainly meet Your needs.

Our products have been designed and manufactured in total compliance with the current regulations, by choosing the best materials to obtain durability and ease of use of the product.

We ask you, therefore, to read this manual carefully and completely, following strictly the instructions contained herein.

1.1 Use of this manual

The instruction manual is a document drawn up by the manufacturer and is part of the product: it integrates the specific rules of application and general rules for people, animals and objects safety. In the event that the product is resold, handed over, rented or sold to others, it must always be accompanied by this manual; therefore, it is recommended to use and keep it with care for the entire operative life of the product.

The main objective of this manual is to make known the proper and safe way to use the equipment.

No part of this manual may be reproduced, copied, or shared in any way, without the written permission of the manufacturer.

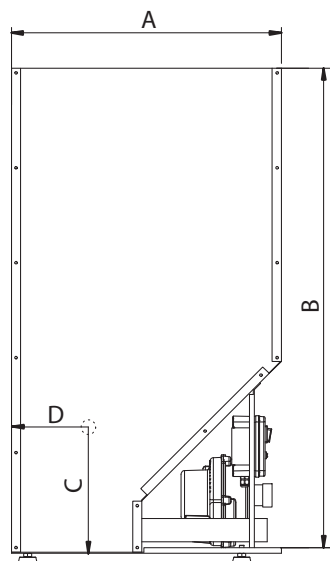
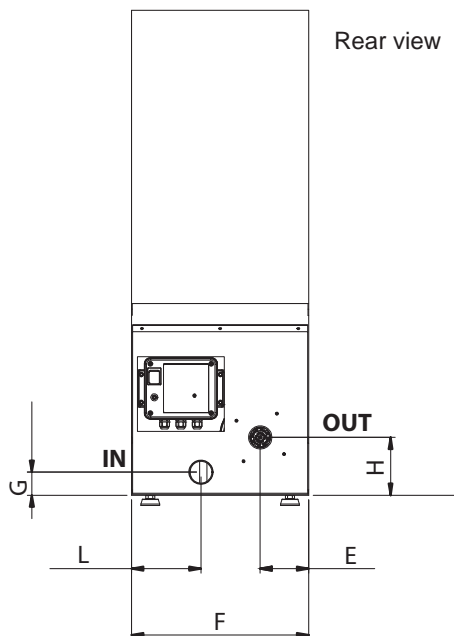
The manufacturer reserves the right to make improvements or modifications to this manual and to the equipment at any time, without obligation to advise third parties.

2 WARNINGS

- Do not use the machine for any improper use.
- Do not let children near the machine.
- This unit must not be used by people (including children) with reduced physical, sensory or mental capabilities, or with lack of experience and knowledge, unless they are supervised or instructed in the use of the unit by a person responsible for their safety.
- Use only original spare parts.
- In order to operate easily on the tank, it is necessary to leave a space free from any obstacle all around and above it.
- This tank can contain wood pellets and pomace: other fuels with different sizes and specific weights must be evaluated before the use (ask the seller for advice).
- Before filling the tank for the first time, check that it is carefully levelled and that the adjustable support feet are firmly placed.
- It is forbidden to add other loads or weights to the tank, in addition to the fuel contained therein.
- Never use the tank structure as a load-bearing or fastening element for any other support or equipment.
- It is essential to ventilate the place in which the tank is installed during the fuel loading.
- Never remove the closing door and the bag grid except for the time strictly necessary for filling and maintenance operations.
- The manufacturer declines any liability or guarantee, if the buyer or anyone makes changes or even minor modifications to the purchased product.

3 TECHNICAL DATA AND DIMENSIONS

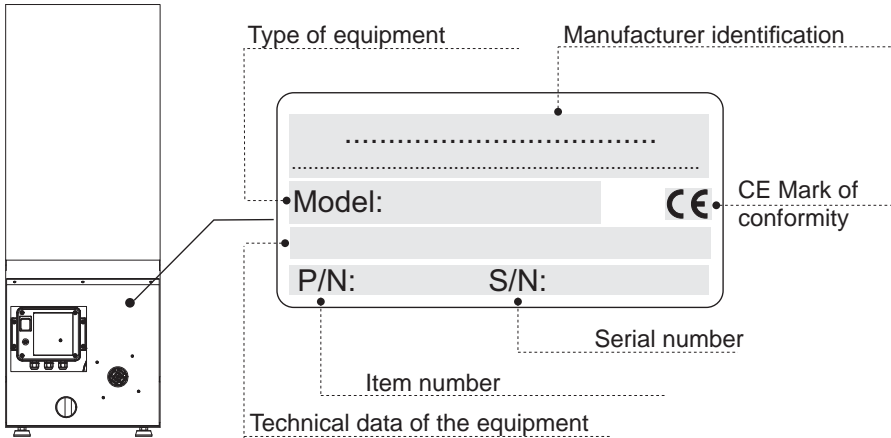
English



Article		AP3460.00.01	AP3460.00.02
Protection degree	IP	IP20	
Operating temperature min/max	°C	0 ÷ 40	
Degree of humidity min/max	%	40 ÷ 80	
Power supply	V ac	230	
Frequency	Hz	50	
Motor power	W	1350	
Max absorptionx	A	5,8	
Thermal switch	A	8	
Fuse		T16A5x20	
Weight	Kg	32	40
Net volume	l	199	330
Content max	kg	Net volume x 0,8	
Pipe	Ø mm	50	50
Maximum air flow	m ³ /h	270	270
Noise level	dB(A)	<70	
Measurement A	mm	580	650
Measurement B	mm	1040	1320
Measurement C	mm	303	303
Measurement D	mm	180	180
Measurement E	mm	105	130
Measurement F	mm	380	450
Measurement G	mm	50	45
Measurement H	mm	124	120
Measurement L	mm	150	187

3.1 Identification plate

Do not remove or damage the identification plate.



3.2 Safety symbols



DANGER OF VOLTAGE OR ELECTRICAL CURRENT

Danger of serious personal injuries.

During maintenance operations, always disconnect the power supply and make sure that it cannot be restored.



DANGER OF CUTTING

Danger of serious personal injuries.

During maintenance operations, always disconnect the power supply and make sure that it cannot be restored.



DANGER OF AUTOMATIC STARTING

Danger of serious personal injuries.

During maintenance operations, always disconnect the power supply and make sure that it cannot be restored.



DANGER FOR THE HAND WHEN THE SCREW CONVEYOR IS IN OPERATION

Danger of serious personal injuries.

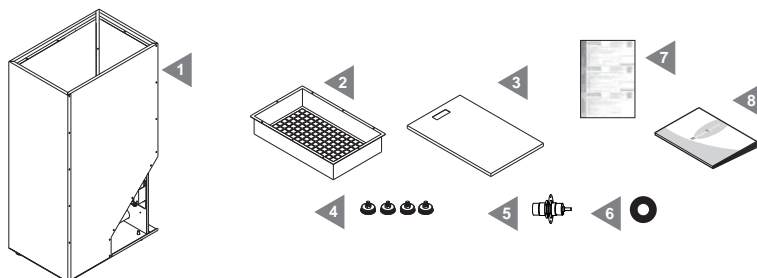
During maintenance operations, always disconnect the power supply and make sure that it cannot be restored.

It is recommended to pay full attention to pictograms and warnings of danger and prohibition in the present different parts of the equipment: if not respected, hazardous situations may occur.

4 PACKAGING CONTENT

After opening the packaging, verify that the material contained in it conforms to the following list:

- | | |
|-------------------------|---|
| 1) motorized Tank | 5) minimum level sensor with flange |
| 2) bag support grid | 6) rubber gasket |
| 3) cover | 7) Warranty form |
| 4) n° 4 adjustable feet | 8) Assembly, use and maintenance manual |



Check that the product corresponds to the one ordered and that no transportation damage is evident.

Should this not be the case, please contact immediately the seller.

5 INSTALLER'S RESPONSIBILITIES

To ensure proper operation of the product, follow these guidelines:

- Only perform the activities described in these instructions
- Perform all activities in accordance with applicable regulations
- Explain to the user the operation and use of the product
- Explain to the user how to maintain the product
- Report to the user the potential dangers related to the use of the product

6 PROPER USE OF THE PRODUCT

The motorized storage tank is designed for the storage of pellets or other granular biomass fuels, and if used as an additional fuel reserve, automatically fills the boiler, stove or fireplace tanks.

The tank consists of a control system that guarantees the automatic filling, a sensor that stops the system in case of a lack of fuel inside, and a motor, whose high suction power guarantees the transport of the pellets to the boiler. To complete the system it is necessary to add two 50 mm Ø rigid steel pipes or antistatic flexible hoses are sufficient, one for transporting the fuel and one for the return air, and a dispenser installed on the boiler tank for the fuel discharge (these items are not supplied with the tank).

By adding the additional lift module, the 199 litre storage unit can increase its net volume by a further 92 litres.

7 INSTALLATION

It is the installer's responsibility to verify the presence of any risk of danger in the installation area and to determine the suitability in accordance with both the applicable laws and the product characteristics described in this manual.

Only specialized technical personnel are authorized to do the installation and maintenance of the product. All operations must be carried out following the accident prevention regulations and in compliance with safety warnings.

If you find any damage, anomalies or shortcomings in the product, do not proceed with the installation and immediately contact your dealer.

The motorized tank must be installed in a covered place, where the temperature is between 0 and 40 ° C and the relative humidity is between 40 and 80%, it must not be placed on damp walls and must not be exposed to the elements, it must be installed levelled and placed on a solid and smooth floor to facilitate the adjustment of the feet.

The motorized tank must be connected to the fuel release dispenser (accessory on request) (see figure 1) using rigid or flexible antistatic pipes, the pipes must have the minimum number possible of elbows, they should have a minimum radius of 30 cm, while the maximum vertical gap allowed for the fuel transport pipe is 3 m and the total length of the pipes must not exceed 5 m (each).

All hose connections and junctions must be closed with steel hose clamps to ensure a perfect airtight seal. Before finally positioning the storage unit, complete it by fitting the sensor, already equipped with a flange, by inserting it into the hole on the side of the storage unit, inserting the sealing gasket (see figure 6). Also install the four adjustable feet in their respective threaded inserts on the bottom of the warehouse. The dispenser (accessory on request, see figure 5) must be installed on the boiler tank to be refilled. The magnetic contact sensor called REED, applied to the dispenser's exhaust door, via an electrical connection to the motorized warehouse, will check the correct functioning of the conveyor system. The magnetic contact sensor will also ensure that the fuel transport system is turned off if the tank to be refilled is full (see the dispenser instruction manual).

8 PIPES CONNECTION

For connections between the motorised tank and the dispenser, it is essential to use rigid steel or flexible pipes with an internal diameter of 50 mm. All pipe junctions must be sealed airtight and must therefore be carefully tightened. No oblique sections, only vertical or horizontal sections should be made. Very long sections must be carefully fixed to the wall or to resistant supports; all elbows must have a minimum radius of 30 cm. Connect the Ø 50 mm pipe from the **OUT** outlet to the connection on the dispenser called **OUT**, connect the Ø 50 mm pipe from the IN outlet to the connection on the dispenser called **IN**. Fuel will flow through the **IN** pipe, while only air and dust will flow through the **OUT** pipe.

All the pipe sections used for the transport system must be antistatic in order to guarantee the effective dispersion of static currents and must be connected to an grounding point in the electrical system (see figure 1). The grounding point of the motorised tank (see figure 2) must be connected to an grounding point of the electrical system.



figure 1

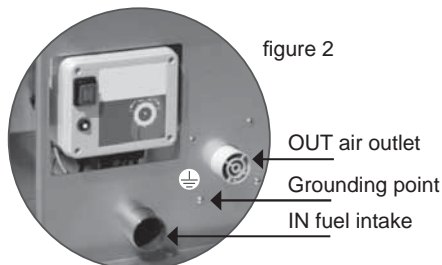


figure 2

OUT air outlet

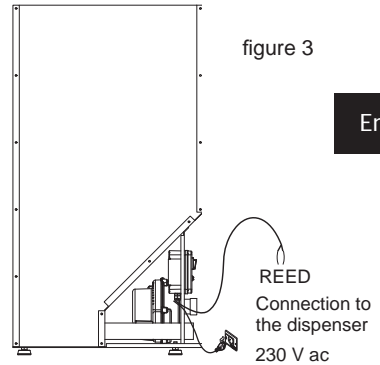
Grounding point

IN fuel intake

9 ELECTRICAL CONNECTION

Before making the electrical connection to the mains, check that the voltage corresponds to that required and that the electrical system to which the product is connected is built in compliance with current regulations.

Connect the two wires called REED with the corresponding ones coming from the sensor of the dispenser installed on the boiler (see figure 3 and dispenser instructions).



English

10 START UP AND USE

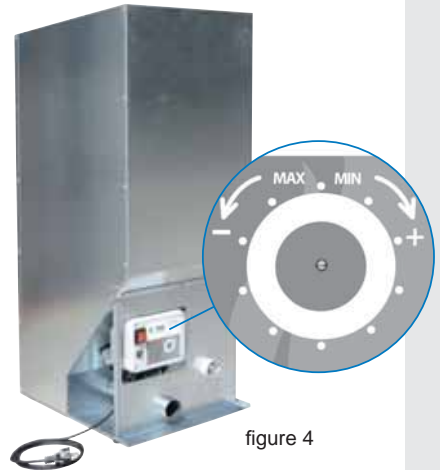
Before starting the first ignition of the motorized storage unit, make sure that:

- inside the warehouse there are no objects, rags or processing residues, so discharge into it a quantity of fuel (pellets) that exceeds the minimum level sensor
- the warehouse is stable and the pipes are connected to it properly
- the electrical connections are correctly and permanently fixed
- the led of the minimum level sensor is switched on
- the power supply is correct and stable
- the exhaust door of the dispenser (see dispenser instructions) is closed and there is room in the boiler tank for further fuel to flow.

At this point the fuel transport can start, place the red light switch on 1 and the system will start operating.

To adjust and set the running time of the engine, it is necessary to act with a screwdriver on the potentiometer positioned on the electrical panel (see Figure 4) clockwise to increase the running time of the engine, vice versa counterclockwise to shorten the running time.

It is important that the operating time is sufficient to transport only the appropriate amount of fuel to fill about half the volume of the dispenser (see dispenser instructions), a shorter time will allow less fuel to be transported, but too long a time could overfill the dispenser and damage the system.



The operating time may also need to be changed at any time in the future to accommodate a different type or specific weight of the fuel used.

When the fuel level inside the motorized warehouse decreases, the sensor located inside it (see Figure 2) will stop the engine operation, leaving the transport system in standby mode, as soon as the correct fuel level is restored, the system will restart automatically.

10.1 Minimum level sensor calibration

The sensitivity of the minimum fuel level sensor is already calibrated, but if a new calibration is needed, proceed as follows (see Figure 7):

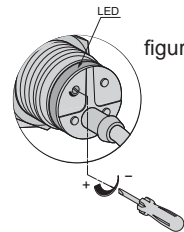
- Place the sensor in front of the surface to be detected (pellets).
- Use a screwdriver with a max diameter of 3 mm.
- Rotate the potentiometer clockwise or counterclockwise for 2/3 turns until it reaches the correct activation point (LED on).
- If turning the potentiometer the LED lights up immediately, turn it counterclockwise for about 45° and then turn it clockwise again until it reaches the point of activation (LED on).



figure 5



figure 6



10.2 Operational safety

There is a safety that guarantees the correct functioning of the tank, this safety acts every time for three consecutive engine operating cycles, fuel is not sucked and therefore the dispenser remains empty.

In this case, the security interrupts the operation which is not automatically restored.

The causes of malfunction can be various, including the following:

- A) lack of fuel inside the tank
- B) A fuel clog has formed in the pipeline between the tank and the dispenser.
- C) Pipes are not intact or there are air leaks in their fittings
- D) The filter inside the dispenser is blocked
- E) The dispenser exhaust door is not tightly closed during suction.

When the cause of the blockage has been removed, the light switch must be switched off for at least 3 seconds and then turned on again (light on).

If the problem occurs frequently, it is advisable to contact the service centre.

11 MAINTENANCE AND END-OF-LIF

The normal maintenance of the motorized tank includes:

- periodic cleaning of the bottom to prevent excessive dust deposits
- cleaning the motor ventilation grides with compressed air

Using fuels with a low presence of dust guarantees a better functioning of the motorized tank

11.1 End-of-life

The disposal of packaging, accessories and machine must be executed in accordance with applicable laws, ensuring the recycling of any of the core components.



12 SAFETY REQUIREMENTS FOR FUEL STORAGE TANKS

SAFETY REQUIREMENTS for pellet storage tanks with capacity up to 10 t



Keep the doors closed. Access is permitted only to authorized personnel under the supervision of a person outside



Do not smoke and approach flames or other sources of ignition.



Danger of death due to high concentrations of carbon monoxide (CO) and lack of oxygen.



In the 4 weeks after the fuel filling, enter only with a CO detector.



Aerate the storage room for at least 15 minutes before entering and keep the door open during your permanence.



Ensure an adequate and permanent aeration of the storage room through vent covers, openings or fans.



Wounding risk for moving systems



Turn off the boiler at least one hour before the pellet is delivered.



Proceed to the filling according to the requirements of the boiler manufacturer and the pellet supplier.



Protect pellets from humidity



In case of fire suspect keep the front door and any other opening of the storage room close and call the firemen.

13 WARRANTY

PRODUCT LIMITED WARRANTY CONDITIONS

The Manufacturer guarantees to the original purchaser the absence of defects in material and workmanship of the product for the period stated, from the date of purchase. Except as prohibited by applicable law, this warranty is non transferable and it is limited to the original purchaser. The present warranty gives the buyer specific legal rights and the possibility to claim rights which can vary under local laws.

Read all warnings and instructions before using the product purchased.

The entire liability of the manufacturer and your exclusive remedy for any breach of warranty will be at the discretion of the Manufacturer:

(1) To repair or replace the product, or (2) refund the purchase price, provided that the product has been returned to the point of purchase, or such other place as may be specified by the manufacturer, with a copy of the sales receipt or detailed and dated receipt. The shipping and handling are not free of charge, except in cases where this is prohibited by applicable law.

To repair and replace the product, the manufacturer may, at their own discretion, use new, refurbished or used parts in good working condition. Any replacement product will be warranted for the remaining time of the original warranty period, or for any period of time that complies with the provisions of the current law.

This warranty does not cover problems or damage resulting from (1) accident, abuse, misapplication, repair, alteration or unauthorized disassembly; (2) maintenance operation, use which is not in accordance with the product instructions or connection to an improper voltage supply; or (3) use of consumables and spare parts which are not supplied by the manufacturer or authorized service center.

Valid warranty claims are generally processed through the point of purchase of the product. Please agree this detail with the retailer where you purchased the product.

The Warranty claims that cannot be processed through the point of purchase, as well as any other product related questions, should be addressed directly to the manufacturer. Addresses and contact information for customer support can be found at the internet address www.advanceeasymoving.com

Except as stated by relevant laws in force, any implied warranty or condition of merchantability or suitability for a particular purpose relating to this product is limited to the duration of the Limited Warranty period for the specific product purchased.

Some jurisdictions do not allow limitations on the duration of implied warranties or the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights and you may have other rights that vary from state to state, or from jurisdiction to jurisdiction.

Consumers have legal rights under applicable national legislation governing the sale of consumer products. Such rights are not affected by the warranties in this Limited Warranty.

No dealer, agent, or employee of the manufacturer is authorized to make any modification, extension or addition to this warranty.

14 CERTIFICATION

Declaration of absence of harmful substances

The manufacturer declares that their products and equipment are made with materials compliant with the current regulations regarding protection of health and the environment and does not contain substances classified as SVHC (Substance of Very High Concern) in accordance with Regulation EC 1907/2006 (REACH, or registration, evaluation, authorization and restriction of chemical substances).

Although in the working cycles of raw materials and our products such substances are not used, their presence in the size of p.p.m. (parts per million) cannot be excluded due to micro-pollution of raw materials.

Declaration of conformity

The Manufacturer declares that its products and equipment comply with the following standards:

EN ISO 12 100:2010 (Risk Assessment Calculator)

EN ISO 14 121-1 (Safety of machinery)

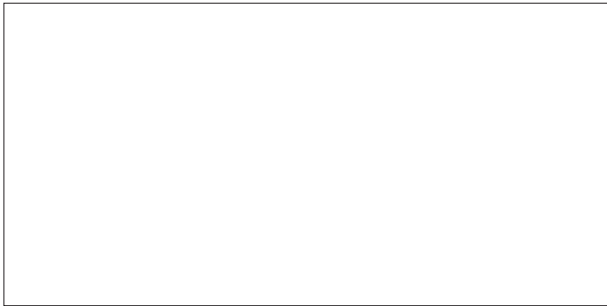
The following Directives:

No 2006-42-EC

No 2014/35/EU (LVD)

No 2014/30/EU (EMC)

M-TANK



F0920593.03

ADVANCE
Easy Moving 

info@advanceeasymoving.com - www.advanceeasymoving.com