

# INSTRUCTION AND MAINTENANCE MANUAL

## RAM SERIES



RAM 280  
RAM 280 MP  
RAM 500  
RAM 1000  
RAM T500  
RAM 1000 AV





## 1. INFORMATIVE SECTION

1.1	Foreword.....	4
1.2	Main parts.....	6
1.3	Optional parts.....	7
1.4	Manufacturer's identification data .....	7
1.5	Identification plate.....	7
1.6	Permitted Uses.....	7
1.7	Authorised environmental conditions.....	8
1.8	Noise level .....	8
1.9	Technical data .....	9
1.10	Warranty .....	10

## 2. SAFETY SECTION

2.1	Safety Information .....	11
2.2	Safety recommendations.....	12
2.3	Safety plates and symbols.....	14
2.4	Residual risks .....	14
2.5	Applied Directives .....	15

## 3. HANDLING, UNPACKING AND INSTALLATION SECTION

3.1	Handling.....	16
3.2	Unpacking .....	16
3.3	Installation .....	22

## 4. OPERATION SECTION

4.1	Description of the controls .....	23
4.2	Operating cycle .....	24
4.3	Storage – Decommissioning .....	25

## 5. MAINTENANCE SECTION

5.1	Informative notes .....	26
5.2	General safety regulations.....	27
5.3	Replacing the filter .....	29
5.4	Cleaning or replacing of the oil proof cartridge.....	31
5.5	Troubleshooting.....	33
5.6	Scrapping .....	34



## 1. INFORMATIVE SECTION



This manual forms an integral part of the vacuum cleaner. Read this manual and the other attachments supplied carefully. Knowledge of the instructions here contained is indispensable for the safe use and maintenance of the vacuum cleaner

**IMPORTANT** - The DEPURECO term and logo in this document refer to and are the property of **DEPURECO INDUSTRIAL VACUUMS S.r.l.**

This document remains the exclusive property of DEPURECO S.r.l. Full or partial reproduction by any means (graphical, electronic, etc.) is prohibited without prior authorisation from the Company Management.

### 1.1 Foreword

Dear Customer

Thank you for having chosen DEPURECO; we hope you will enjoy using your new DEPURECO RAM series vacuum cleaner. This manual has been drafted in order for our customer to fully appreciate the quality of this machine. Please read all sections before using the machine for the first time.

It includes information, recommendations and important warnings concerning the use of the vacuum, which will help fully exploit the technical properties of your machine.

Read messages, warnings and indications preceded by the following symbols carefully:



**For the safety of people**



**For the integrity of the vacuum cleaner**



**For the safeguard of the environment**



This manual describes the following models:

## RAM 280 MP

The vacuum cleaner is equipped with the following filters:

- ☐ **OIL PROOF CARTRIDGE (P12475)**
- ☐ **PPL FILTER (P09679)**
- ☐ **GRID BASKET (P09626)**

This manual provides all the necessary information for the use and maintenance of the vacuum cleaner.

This specific model has undergone strict testing to ensure maximum reliability. Its operation and durability will depend on proper use and maintenance.

This manual is an integral part of the vacuum cleaner and must accompany it at all times, until its demolition.

In the event it is lost or damaged, you can request another copy from **DEPURECO INDUSTRIAL VACUUMS S.r.l.** (henceforth shortened to **DEPURECO**).

The technical information contained in this manual is exclusive property of **DEPURECO** and must be considered confidential. Reproduction, even partial, of graphics, text and illustrations is prohibited by law.

Some details shown in the figures in this manual may differ from those on your vacuum; this is because some components may have been removed to ensure maximum illustration clarity.

This manual has been divided into sections for easy consultation and each section has been identified by a specific graphical symbol.

The topics covered in this manual are those expressly required by Machinery Directive 2006/42/EC and the technical data are taken from the technical file archived at **DEPURECO**.

With reference to Regulation 1907/2006/EC (REACH), **DEPURECO** hereby declares that no Substances of *Very High Concern* - (SVHC) included in the Candidate List, are contained in its products.

This manual should be kept in a place accessible to all personnel in charge with operating and performing maintenance on the vacuum cleaner.

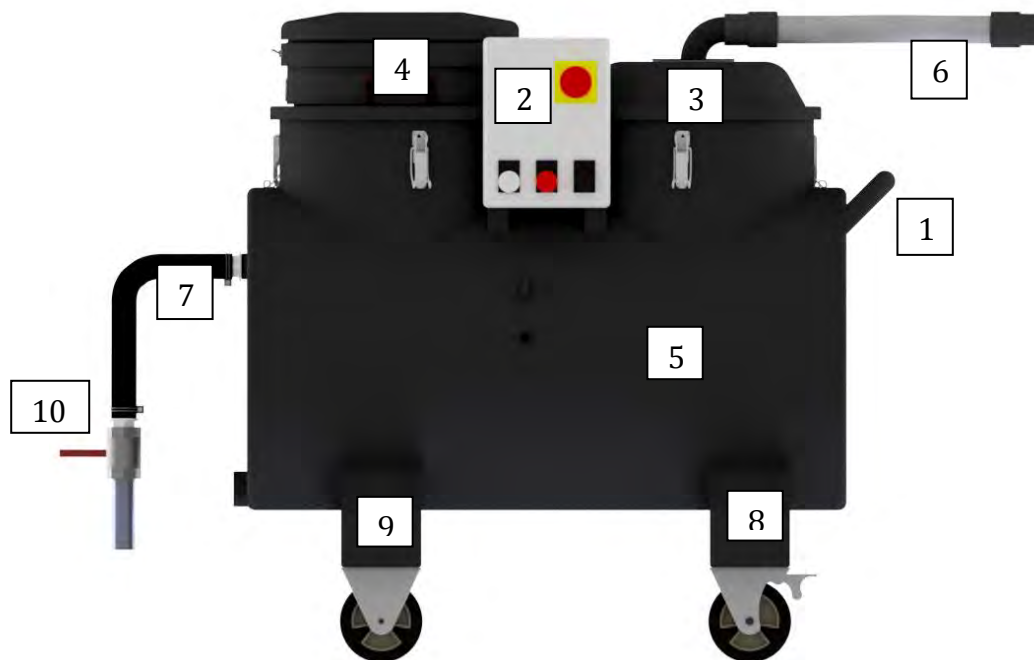
In the event of any dispute arising, the Court of Turin (Italy) shall have jurisdiction



This manual forms an integral part of the vacuum cleaner. Read this manual and the other attachments supplied carefully. Knowledge of the instructions here contained is indispensable for the safe use and maintenance of the vacuum cleaner



## 1.2 Main parts



1. Handle
2. Electrical panel
3. Cap
4. Motor head
5. Tank
6. Inlet
7. Outlet
8. Pivoting wheels
9. Fixed wheels
10. Discharge ball valve



### 1.3 Optional parts

A wide range of optional accessories is available from DEPURECO depending on the intended use of the vacuum.

### 1.4 Manufacturer's identification data

#### **DEPURECO INDUSTRIAL VACUUMS S.r.l.**

Corso Europa 609 - 10088 Volpiano (TO) - ITALY

phone +39 011 98 59 117 - fax +39 011 98 59 326 | VAT NO. 02258610357

e-mail: [depureco@depureco.com](mailto:depureco@depureco.com) - website: [www.depureco.com](http://www.depureco.com)

### 1.5 Identification plate

The data on the vacuum identification plate must be referred to in any correspondence with the manufacturer or the dealer.

<b>DEPURECO</b>		Corso Europa 609 10088 VOLPIANO Tel. 011/98.59.117 Fax 011/98.59.326 MADE IN ITALY	
Model		Serial No.	
Dust class		kg	Year



### 1.6 Permitted Uses

These vacuum cleaners are designed and built according to the 2006/42/CE (Machine Directive) for an exclusive professional industrial use; either way, for any non-domestic use,

This vacuum cleaner is suitable for the cleaning and the collection of oil, coolants, emulsions and swarf – non-flammable and non-harmful – and to reintegrate the filtrated liquids inside the machine tool.

The vacuum cleaner was conceived to be used by only one operator.

In accordance with the Directive 1999/92/EC, whenever in the presence of combustible dust and/or flammable gas, it's the responsibility of the employer to carry out the classification of the Zone and to choose a device in the appropriate category (According to the definition given in the 2014/34/EU Directive).

Any other use is considered **IMPROPER**.



## 1.7 Authorised environmental conditions

To ensure the correct operation, the vacuum cleaner must be kept away from atmospheric agents (rain, hail, snow, fog, dust in suspension, etc.) in an area with a room temperature range between 0° and 40°C and a relative humidity no higher than 70%.  
The work environment must be clean and suitably lit.

## 1.8 Noise level

The phonometric tests performed on this specific vacuum cleaner model demonstrate a sound pressure level of

RAM 280 MP

72 dB(A)



### WARNING!

Workers exposed to sound pressure levels higher than 85 dB(A) must be protected by suitable personal protection device (PPE) such as certified ear muffs.



Under these conditions, workers must be provided with adequate training and information on risks arising from noise exposure.



## 1.9 Technical data

	U.M.	RAM 280 MP
Weight*	Kg	220
Overall dimensions**	mm	700x1450
Height	mm	1400
Voltage I Frequency	V - Hz	230 – 50/60
Power	kW - HP	4,3 / 5,8
Maximum vacuum	mbar	250
Maximum air flow	m <sup>3</sup> /h	570
Noise level	dB (A)	72
Inlet diameter	mm	50
Liquid capacity	L	280
Solid capacity	L	40
Intake	L/sec	280/63
Discharge	L/sec	280/60

(\*) weight without packaging - packaging weight = 20 Kg

(\*\*) machine dimensions without packaging





## 1.10 Warranty

DEPURECO guarantees this model of vacuum cleaner for a period of 24 months from the date of purchase, indicated on the receipt at the time of delivery of the product.

The guarantee is null and void in the event that the vacuum is repaired by unauthorised third parties or by using equipment, accessories or components not supplied or not authorised by DEPURECO, or if the serial number is removed (during the guarantee period).

For the duration of the guarantee, DEPURECO undertakes to repair or replace free of charge parts and components which prove to have manufacturing defects.

Repairs will be exclusively executed at a DEPURECO site or in a DEPURECO approved Assistance Centre and the machine must be sent free of charge (freight cost at user's charge unless otherwise agreed).

The guarantee does not cover cleaning of working parts.

The purchase invoice must be shown to the authorised technical personnel carrying out the repair and must accompany the vacuum during its shipment.

Defects that are not evidently due to materials or manufacturing will be examined solely at our premises or at a Technical Service Centre of our choosing.

Should the complaint be unjustified, all repair and/or replacement expenses shall be charged to the purchaser.

In any case, the following items are not covered by the guarantee: accidental damage due to transport, negligence, abnormal use, improper use, non-compliance with the instructions contained in this booklet or arising from phenomena that do not depend on normal use/operation of the vacuum.

DEPURECO shall not be held liable for any injuries to persons or damage to objects caused by misuse or improper use of the vacuum.

In the event of any dispute arising, the Court of Turin (Italy) shall have jurisdiction.



To use the warranty, visit [www.depureco.com](http://www.depureco.com) or photocopy the form available on the last page of this manual, fill it in all its parts (in capital letters would be recommended), and send it via fax to Depureco at the number + **39 011 98 59 117**



**In the event of doubts, avoid interpreting the information!  
Call your reseller immediately!**



## 2. SAFETY SECTION

### 2.1 Safety Information



As per Italian Legislative Decree 81/08 and subsequent modifications, the Safety Manager must train and inform workers about the risks involved with using the vacuum cleaner so that they may be able to avoid injury to themselves and others.

The use of device by people (including children) with limited physical and mental capacities or lacking in experience and knowledge is strictly forbidden, unless they are supervised by a person who is experienced in the use and safe handling of the device.

Children must be supervised to make sure they will not play with the device.

Failure to comply norms, laws or basic safety precautions, may cause accidents during operation, maintenance and repair of the vacuum cleaner. Accidents can frequently be avoided by recognising potentially hazardous situations before they occur. Adequate training is crucial to this end.

DEPURECO shall not be held liable for accidents or damage due to the improper use of the vacuum by untrained personnel or to failure to comply, even partially, with the occupational safety standards and intervention procedures contained in this manual.

Safety warnings and precautions are indicated in this manual as well as on the product itself. Operators must pay special attention to these hazard warnings to prevent accidents with serious consequences for themselves and other people.

DEPURECO designs and manufactures its equipment and accessories with care, identifying and compensating possible risks related to their use. In the event of equipment, procedures, work methods or techniques not expressly provided for by DEPURECO being used, it is crucial to ensure beforehand that there are no dangers for oneself and the others. Nevertheless, DEPURECO shall not be held liable.



**Use exclusively Depureco original spare parts.**

Depureco disclaims any liability in case spare parts other than original have been used.



## 2.2 Safety recommendations



### **WARNING!**

The following information is essential in view of preventing all hazards that may occur while the vacuum cleaner is running. However, they cannot replace the expertise and common sense of operators as an overall framework for the prevention of accidents.

Structural damage, alterations or improper repairs can modify the protective capacity of the vacuum, thereby nullifying this certification and releasing DEPURECO from any liability.

Each section lists further safety measures specific to the various functions.

### **WARNING!**

#### **Setting to work – connection to the power supply**

- Make sure there is no evident sign of damage to the vacuum cleaner before starting work.
- Before plugging the vacuum cleaner into the electrical mains, make sure the voltage rating indicated on the data plate corresponds to that of the electrical mains.
- Plug the vacuum cleaner into a socket with a correctly installed ground contact/connection.  
Make sure that the vacuum cleaner is turned off.
- The plugs and connectors of the connection cables must be protected against splashes of water.
- Check that the vacuum cleaner is properly connected to the electrical mains.
- Use the vacuum cleaner only when the cables that connect to the electrical mains are in perfect condition (damaged cables could lead to electric shocks!).
- Regularly check there are no signs of damage, excessive wear, cracks or ageing on the electric cable.

### **WARNING!**

#### **When the vacuum cleaner is operating, do not:**

- Crush, pull, damage or tread on the cable that connects to the electrical mains.
- Only disconnect the cable from the electrical mains by removing the plug (do not pull the cable).
- Only replace the electric power cable with one of the same type as the original: H07 RN - F. The same rule applies if an extension is used.
- The cable must be replaced by the manufacturer's Service Centre staff or by equivalent qualified personnel.

# CAUTION!



---

## It is absolutely forbidden;

- For underage and non-trained people to use this vacuum cleaner.
- To connect the vacuum cleaner to mains without suitable earthing.
- To operate the vacuum cleaner outdoors in the presence of atmospheric precipitations.
- To operate the vacuum cleaner without locking the swivelling wheel through the special brake located on it.
- To operate the vacuum cleaner on uneven ground or in non-horizontal positions.
- To operate the vacuum cleaner in corrosive environments.
- To operate the vacuum cleaner in working environments not classified according to the directions given on the device's plate.
- To vacuum the following materials:
  1. Flaming materials (embers, hot ashes, lit cigarettes etc...)
  2. Open flames
  3. Combustible gases
  4. Flammable, combustible or aggressive liquids (gasoline, solvents, acids, alkaline solutions etc...)
  5. Dusts/Substances and/or spontaneously combusting explosive mixtures of them (magnesium or aluminium dusts etc...)
- To tamper with or modify the return valve set up by the manufacturer
- The use of the JETCLEAN system in the presence of potentially explosive clouds in the atmosphere.
- To carry out maintenance on the vacuum cleaner in ATEX classified areas
- To carry out maintenance on the vacuum cleaner without first having switched the device off and disconnected the plug from the socket.
- To keep foreign materials such as debris, oil, tools or other objects in the bin which could disrupt the functioning and cause harm to people.
- To use flammable or toxic solvents such as gasoline, benzene, ether or alcohol for cleaning.
- To operate the vacuum cleaner without the filtering unit provided for by the manufacturer.
- To operate the vacuum cleaner without safety devices.
- To wear loose or flowing apparel such as ties, scarves, or torn clothing that could get caught on the vacuum cleaner or vacuumed by the device.
- To open the waste bin while the vacuum cleaner is working.
- To open the waste bin in an area which has been classified potentially explosive.
- To use extension leads, plug-in connection devices and adapters.
- To climb on the vacuum cleaner.
  
- To touch electrical wires, switches, buttons, etc. with wet hands.



- To touch some components which could reach high temperatures (such as the motor's terminal box and the motor housing in particular) while operating the vacuum cleaner.



#### WARNING!

This vacuum cleaner could contain oil mists that may be hazardous to your health. The emptying out and maintenance procedures must be carried out exclusively by specialized personnel wearing suitable safety clothing.

The manual must be available at all times to be consulted about the operation cycle or any time a doubt may arise on how to handle the machine.

Never switch the machine on in the absence of a complete filtering system.

## 2.3 Safety plates and symbols

Plates with safety symbols and/or messages are applied to the vacuum and its packaging. These pages show their precise location and the nature of the hazard.



#### Warning!

Ensure that all safety messages are perfectly legible.

Clean them using a cloth with water and soap. Do not use solvents, naphtha or petrol.

Request replacements for damaged plates from **DEPURECO**.

If a plate is located on a component that is being replaced, make sure to fit the old plate to the new component.



Attention! Do not carry out maintenance operations in presence of voltage.

Warning! High Voltage.



Read the instructions on the packaging carefully before handling the vacuum cleaner

## 2.4 Residual risks



DEPURECO recommends complying with the instructions, procedures and recommendations in this manual and with the safety standards in force. DEPURECO also recommends using suitable personal protective equipment as well as the protection devices integrated in the vacuum.

The residual risks analysed on the vacuum and/or its components could be:

**Electrical risks during maintenance due to the requirement to work on live parts**

Pursuant to Italian Legislative Decree 81/08 – articles 80 to 87 – it is prohibited to operate on live parts, notwithstanding the exceptions set forth by said Legislative Decree.

**Risks associated with incorrect use in presence of explosive and inflammable liquid substances**

The vacuum must not be used in environments containing liquid substances or liquids that can evaporate at room temperature, inflammable powders and gas.

**Risks related to operation in humid environments**

Respect the limitations indicated in this manual, in section 1.5 "Authorised environmental conditions".

**Risk of incorrect interpretation of the safety pictograms**

With reference to risk analysis and identification, DEPURECO has installed hazard labels on the vacuum, in compliance with the standards concerning graphical symbols.

The user must immediately replace any safety plate rendered illegible due to wear or damage.



**Warning!**

The removal of safety plates from the vacuum and/or its components and packaging is strictly prohibited.

DEPURECO shall not be held liable for the vacuum's safety in the event of failure to comply with this prohibition.

## 2.5 Applied Directives

The following directives apply to the vacuum cleaner described in this manual:

- 2006/42/EC Machinery Directive
- 2014/30/EU Electromagnetic compatibility directive
- 2011/65/EU - ROHS - Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment
- 2014/35/UE – Low tension directive

The reference standards, including their binding requirements, are managed within the DEPURECO Quality Management System and archived by DEPURECO.

## 3. HANDLING, UNPACKING AND INSTALLATION SECTION



### 3.1 Handling

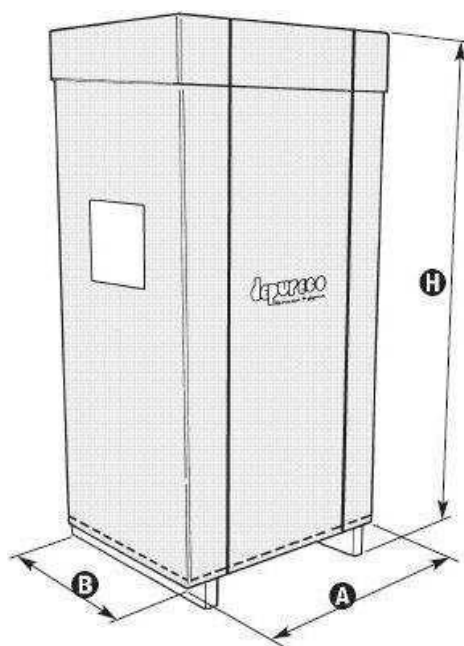


#### Warning!

The instructions for transporting and unpacking the vacuum correctly are shown on the packaging as well.

The following instructions also indicate the operations to be undertaken should the vacuum need to be re-packed or unpacked after subsequent transportation.

Dimensions of packed vacuum cleaner:



	A	B	H
RAM 280 MP	75 cm	145 cm	160 cm



The vacuum cleaner must be lifted and handled exclusively using a forklift having suitable load bearing capacity.

When using a forklift, lift the load 200 mm off the ground and swing backwards.

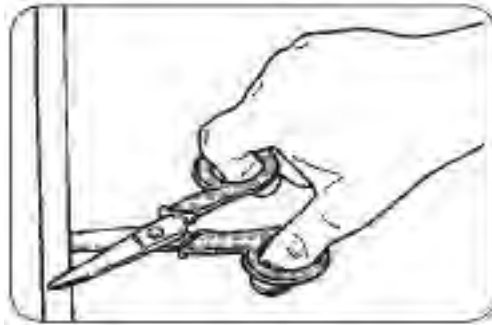
Always keep the height of the working environment in mind when lifting loads.

Before starting any movement, ensure that the area is cleared and that there are no moving objects on the packaging. For lifting and handling, apply operating safety laws and normal instructions for fork-lift truck driving.

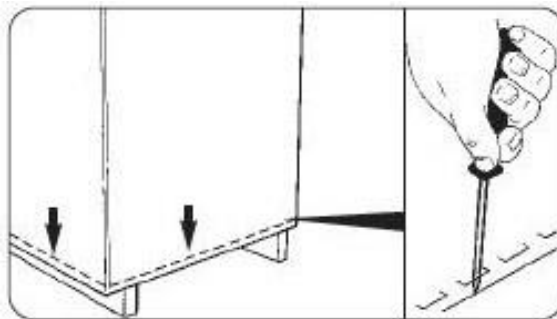
### 3.2 Unpacking



- Cut and unwind the two packaging fixing belts



- remove the staples that fix the carton packaging to the pallet with the aid of a screwdriver



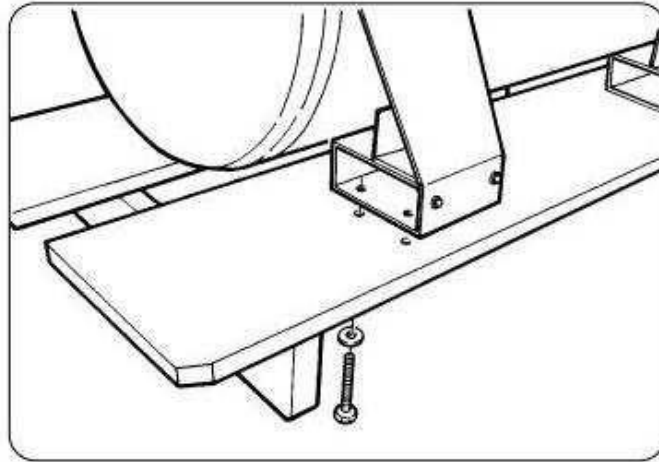
- remove the carton completely







- After removing the protection wrapper, unscrew and remove, from both sides, the screws fixing the machine to the pallet.



The cardboard packaging can be recycled. To protect the environment, make sure to dispose it off in specialised collection centres.

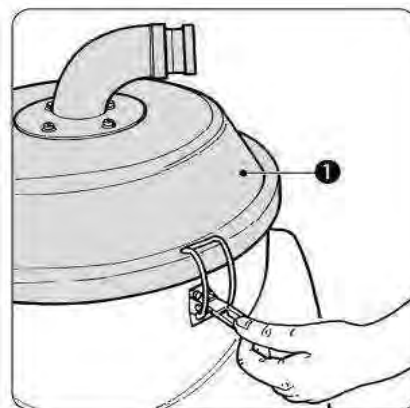


**Warning!**

**Keep the pallet.**

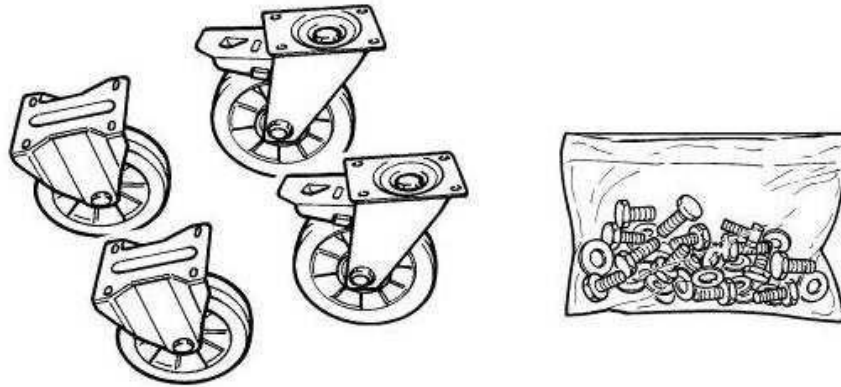
In the event of subsequent transport, the vacuum must be secured to the pallet using the same fastening system.

- Unlock and remove the cap (1)





- Find the 4 wheels and the bag containing the screws



- Close and lock the cap again



**Attention!**

The following operation must be carried out on a flat terrain by a forklift operator and a second person.



**Warning!**

Insert the forklift's forks in the appropriate mountings.



**Attention!**

The forks must go completely inside the mountings.

- Lift the vacuum cleaner 1.5 Mt.

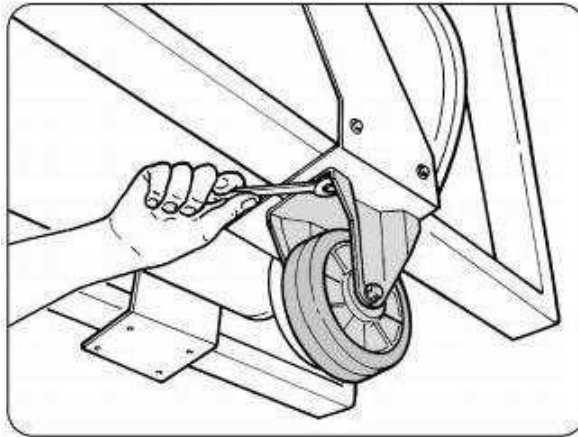


**Attention!**

Block the forklift's movements, switch it off and pull the handbrake. The operator must monitor while the second person is operating.



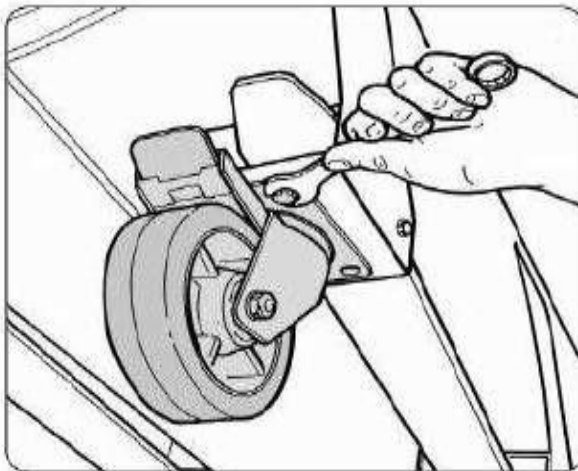
- Install the two fixed wheels on the opposite side of the vacuum's handle



**Attention!**

The second person must operate outside from under the forklift

- Install the two pivoting wheels at the other end on the machine as shown in the picture



- Put the machine back on the ground

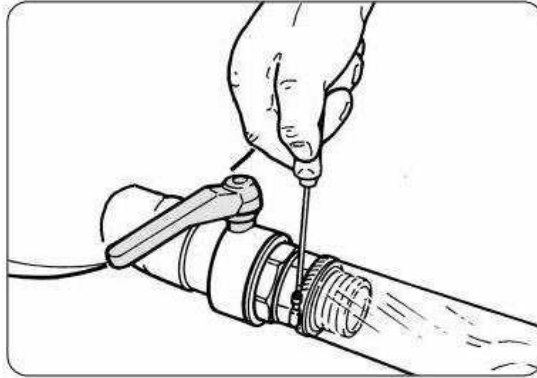


**Attention!**

Never stand under the forklift while the machine is being lowered.



- 
- Connect the discharge hose directly to the dedicated nozzle and fix it by using a clamp as shown in the picture





### 3.3 Installation



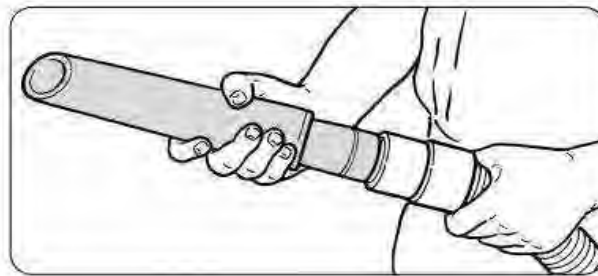
**Caution!**

Before installing the vacuum, it is important to carry out a thorough preventive visual inspection to identify any damage which may have occurred during transport.

In the event of one or more components being damaged, do not continue with installation, inform DEPURECO about the anomaly and agree upon action to be taken.

The vacuum cleaner is already fitted with an appropriate filter intended exclusively to vacuum dry dust or debris

- insert the desired accessory on the hose according to the type of extraction



Note: the flexible hose and the relevant end-pieces and accessories are not included with the STANDARD model. Contact your dealer (or DEPURECO) for information regarding the various types of OPTIONALS that can be used on this specific model.

**The following operation must be carried out by a qualified electrician.**

Ensure that the power supply line corresponds to the voltage and frequency indicated on the identification plate and that it is efficiently earthed.

The vacuum cleaner's electrical current supply socket must be protected by a CE-marked circuit breaker.

Insert the plug (standard supply) into the socket.



**Warning!**

**Do not insert the plug in the power supply socket with wet hands.  
Do not use extension leads.**



## 4. OPERATION SECTION

### 4.1 Description of the controls



**Warning!**

The vacuum can be used solely by authorised personnel after having read these use and maintenance instructions.



The user of the equipment and the maintenance technician, who carry out operations on the vacuum, must be adequately educated, informed and trained, in compliance with the occupational safety standards in force and, during the various operations, must wear personal protective equipment (PPE), such as safety footwear, gloves, protective goggles, mask, etc. The user must comply with the provisions in force concerning extracted materials and their disposal.



1. General I/O - ON/OFF switch
2. Immersion pump selector switch (ON/OFF)
3. White indicator light: presence of voltage
4. Red indicator light: shows that maximum level has been reached inside the tank



## 4.2 Operating cycle

Ensure that the power cord is intact and in perfect state.



**Warning!**

**Before inserting the plug, ensure that the voltage of the power supply line corresponds to the one indicated on the vacuum's identification plate.**

- Make sure the plug is correctly inserted into the socket
- Make sure the hose is properly inserted and locked on the suction inlet.
- Secure the vacuum cleaner using the lever on the swivelling wheels
- Position the discharge hose appropriately
- Open the ball valve on the discharge nozzle
- Rotate the main switch (1) to "I" ("ON") and start the vacuuming
- Lift the three switches on the motor head to start vacuuming
- Position the submerged pump on "ON" to initiate continuous discharge operations



**Caution!**

**Continuous discharge active. Ensure a container dedicated to the collection of the discharged material is present under the hose.**

- When the level of liquid inside the tank rises, a float switch connected to the submerged pump lifts, activating it. The pump starts discharging the liquids from the tank. In the event the maximum quantity of liquids is picked up a second float switch, connected to the electrical board, will stop the intake, which will resume once the level of liquids inside the tank is below the maximum one. Once done the vacuum can be switched off by turning the main switch (1) to "0" and close the valve on the end of the discharge nozzle.



**Caution!**

**Before switching the vacuum cleaner on again make sure, the blower has come to a complete stop.**



Waste disposal must take place in accordance with the laws in force in the country of use of the vacuum cleaner - for Italy Legislative Decree 152/2006 and amendments

### 4.3 Storage – Decommissioning

Remove the filter and clean it; empty the refuse collection container and store the vacuum in a place protected against weather agents with the temperature ranging between 5 and 45 °C and cover it with a nylon tarp to protect it against dust.





## 5. MAINTENANCE SECTION



### Warning!

Special vacuum maintenance must be carried out solely by specialised technicians authorised by the **DEPURECO** dealer.

### 5.1 Informative notes

This section describes the checks and routine maintenance operations required to ensure proper vacuum operation.

Maximum reliability and minimum maintenance costs are the result of a planned maintenance and inspection schedule carefully followed throughout the entire lifespan of the vacuum.

Observe the set maintenance intervals and schedule the interventions according to specific requirements in relation with the vacuum production cycle.

Always use perfectly working tools specifically intended for the operation to be carried out; the use of inadequate or inefficient tools can cause severe damages.

Any other intervention required to remove faults or malfunctions must be expressly authorised by the manufacturer.

In these cases, always communicate the vacuum identification data - see para. 1.4 of this manual.

For significant repairs, refer to the authorised dealer, whose specialised personnel has the technological expertise and is always available for prompt interventions.

For user maintenance operations, the vacuum must be disassembled, cleaned and maintained, where possible, in such a way as to prevent hazards to the maintenance personnel and to third parties. Suitable precautionary measures include decontamination before dismantling, measures for filtered forced ventilation of the room where the appliance is disassembled, cleaning of the maintenance area and suitable personal protection equipment.

Once every three months (or more frequently, according to the operating cycle and the conditions of use), the manufacturer or a qualified technician must check the filters, ensuring that they are not damaged; the tightness of the air system and proper operation of the control devices.

Should maintenance operations or repairs be carried out, all contaminated objects must be adequately cleaned, placed in waterproof bags and disposed of in compliance with the regulations in force.



## 5.2 General safety regulations



### Warning!

All the operations described above must be carried out with the plug disconnected from the socket.



Before starting any maintenance or cleaning operation, wear suitable PPE (protective clothing, goggles and/or gloves, etc.) according to the work to be done.

Place a sign on the vacuum with the message:

**"MACHINE UNDER MAINTENANCE  
DO NOT START"**



Before returning to use, the whole system must be checked according starting procedures.

Run a few trial operating cycles after every maintenance operation to ensure proper machine operation.

Failure to observe these precautions can cause serious injury to personnel.

Maintenance operations must be carried out by trained technicians specialised in the following sectors:

- Mechanical maintenance
- Electrical maintenance

It is the Safety Manager's duty to ensure the professionalism and skills of these technicians.

**Before starting any maintenance operation, the Safety Manager must:**

- Keep unauthorised personnel out of the work area.



- Ensure that the necessary tools are in good conditions and readily available to the maintenance technician.
- Ensure the maintenance technician is equipped with the personal protection equipment required for the specific operation (gloves, goggles, shoes, mask, etc.)
- Make sure the maintenance technician has carefully read the instructions contained in this manual and has perfectly acquired knowledge on the operation of the vacuum and its components.

- Ensure that there is enough light and, if necessary, provide 24 Volt torches.



**Before starting any maintenance operation, the Maintenance technician must:**

cut off all power supplies and set the vacuum cleaner in safety lock condition



**Warning!**

If absolutely necessary operating with the power turned on, pursuant to Italian Legislative Decree 81/08, the maintenance technician must maintain a safe distance, prepare reachable emergency stop buttons and never place hands in the discharge container.

At the end of the procedure and before returning to use, the maintenance technician must check that guards are functioning correctly and the protection devices are intact.

Operations on the motors or on other electrical components must only be carried out by the specially trained electrical maintenance technician authorised by the Safety Manager.



**Warning!**

After any maintenance intervention, the Health and Safety Manager is required to check the safety conditions of the vacuum cleaner and of its safety devices.

**Before every work shift**

- Check that the power cord and the plug are not damaged: replace them immediately if there are any signs of wear, using a cord of the same type (information c/o DEPURECO). This operation is the sole responsibility of an electrician.
- Check the integrity of the safety symbols (pictograms) applied to the vacuum cleaner.
- Verify the efficiency of the filters by checking the vacuum gauge.
- Check the integrity of the hose and of the accessories to be used.



**Warning!**

The flexible hose, if perforated, reduces the suction power and releases dust into the surrounding environment.



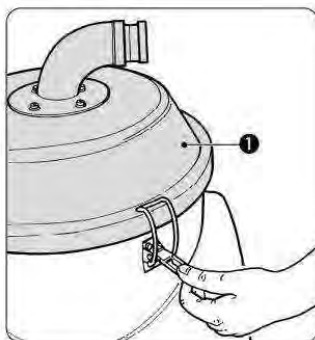
### 5.3 Replacing the filter



**Warning!**  
Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).

Proceed as follows to replace the filter:

- Switch the machine off by turning the main switch (1) to "0"
- Unplug the vacuum cleaner from the socket
- Unlock the lid (1)



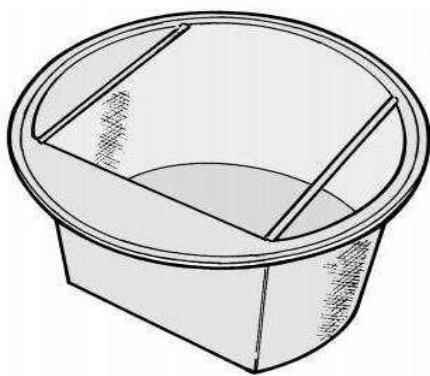
- Remove the lid



- Take the filter out, wash it, or replace it if needed



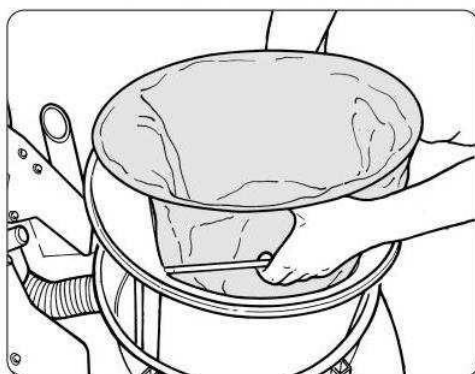
- If there are any solid particles inside the filter or if it is pierced, it's possible to remove the entire filtering group by using the handles, extract the filter and clean the grid basket.



**Attention!**

Any material inside the filter and the filter itself must be disposed of, in accordance with the current laws in force in the country of use of the machine.

- Wash the grid basket, insert the new filter and put it in place again



- Reposition the lid and close it with the dedicated locking hooks

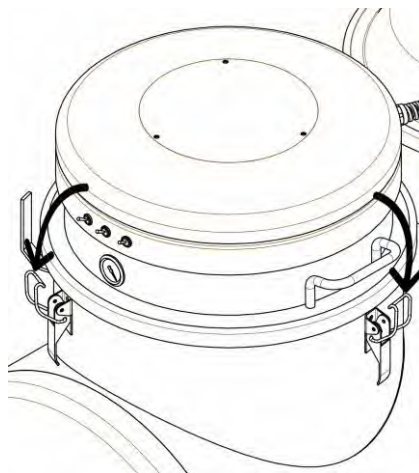
**EXCLUSIVELY USE FILTERS MANUFACTURED BY DEPURECO**



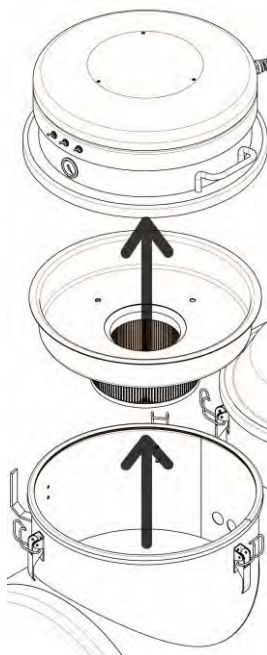
## 5.4 Cleaning or replacing of the oil proof cartridge

Proceed as follows to replace the cartridge

- Switch the vacuum cleaner off by turning the main switch (1) to "0"
- Remove the plug from the socket
- Unlock the vacuum's head

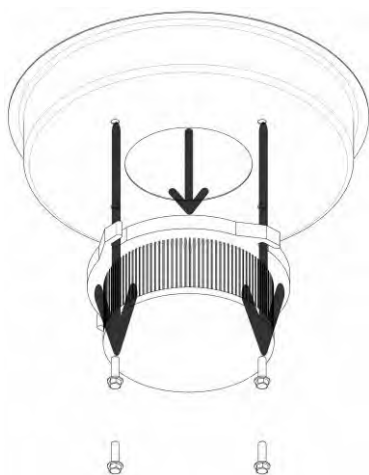


- Lift and remove the ring holding the cartridge





- Remove the screws and replace/clean the cartridge with a water jet



- Screw the cartridge back to the ring
- Reposition the ring inside the machine
- Position the vacuum's head again and lock it with the dedicated hooks

## 5.5 Troubleshooting



FAULT DETECTED	POSSIBLE CAUSE	SOLUTION RECOMMENDED
The vacuum cleaner will not start	<ul style="list-style-type: none"><li>- No electric supply</li></ul>	<ul style="list-style-type: none"><li>- Check for the presence of voltage in the socket</li><li>- Check the integrity of the socket and the cable</li><li>- Contact DEPURECO's technical assistance</li></ul>
	<ul style="list-style-type: none"><li>- Red indicator light on (Maximum tank capacity reached)</li></ul>	<ul style="list-style-type: none"><li>- Empty the tank</li></ul>
Insufficient vacuuming power	<ul style="list-style-type: none"><li>- Grid basket a/o PPL washable filter clogged</li></ul>	<ul style="list-style-type: none"><li>- Clean the filter and the grid basket</li></ul>
Liquids come out of the vacuum cleaner	<ul style="list-style-type: none"><li>- Fastening clamp not correctly fastened</li></ul>	<ul style="list-style-type: none"><li>- Close the clamp completely</li></ul>
	<ul style="list-style-type: none"><li>- Faulty ball valves</li></ul>	<ul style="list-style-type: none"><li>- Replace ball valves</li></ul>





## 5.6 Scrapping



In case of scrapping, to avoid damage to the environment, all components of the vacuum cleaner, must be disposed of responsibly, in appropriate landfills, in compliance with current legislation - for Italy Legislative Decree no. 152/2006 and subsequent amendments. (subsequent modifications and additions).

Before scrapping the machine, the plastic and rubber materials must be separated from the electrical material.

Correct disposal of the product (electrical and electronic equipment waste)

The electrical and electronic parts of this product must be disposed of in compliance with Italian Legislative Decree 151/2005 and subsequent amendments. (Directive 2002/96/EC on WEEE - Waste Electrical and Electronic Equipment)

The parts of the vacuum made of plastic material, aluminium and steel can be recycled in appropriate centres.



**In the event of doubts, avoid interpreting the information! Call immediately your reseller!**



## MAINTENANCE LOG:

**INTERVENTION 1:**

**DATE:**

**TECHNICAL ASSISTANCE:**

**TYPE OF INTERVENTION:**

---

**INTERVENTION 2:**

**DATE:**

**TECHNICAL ASSISTANCE:**

**TYPE OF INTERVENTION:**

**INTERVENTION 3:**

**DATE:**

**TECHNICAL ASSISTANCE:**

**TYPE OF INTERVENTION:**

---

**INTERVENTION 4:**

**DATE:**

**TECHNICAL ASSISTANCE:**

**TYPE OF INTERVENTION:**



**Depureco Industrial Vacuums Srl**  
Società soggetta a direzione e coordinamento COFISE spa

Corso Europa, 609 - 10088 Volpiano (TO)  
**Tel.** +39 011 98.59.117  
**Fax** +39 011 98.59.326

PERFORMANCE ON VACUUM SINCE 1972

[www.depureco.com](http://www.depureco.com)  
[depureco@depureco.com](mailto:depureco@depureco.com)  
[depureco@documentipec.com](mailto:depureco@documentipec.com)

**C.F. e P.I.** 02258610357  
Registro Imprese di Torino - **R.E.A.** TO-1149668  
**Capitale Sociale:** € 25.000 i.v.



## CONTENTS

<b>1.</b>	<b>INFORMATIVE SECTION .....</b>	<b>4</b>
1.0	Preface .....	4
1.1	Identification of the main parts .....	6
1.2	Options .....	6
1.3	Manufacturers identification data .....	7
1.4	Identification plate .....	7
1.5	Intended use .....	7
1.6	Allowed environmental conditions .....	7
1.7	Noise level .....	8
1.8	Technical data .....	8
1.9	Warranty .....	9
<b>2.</b>	<b>SAFETY SECTION .....</b>	<b>10</b>
2.1	Information on safety .....	10
2.2	Safety requirements .....	11
2.3	Safety plates and symbols .....	12
2.4	Residual risks .....	14
2.5	Applied Directives .....	15
<b>3.</b>	<b>HANDLING, UNPACKING AND INSTALLATION SECTION .....</b>	<b>16</b>
3.1	Handling .....	16
3.2	Unpacking, assembling the casters and the exhaust pipe .....	17
3.3	Installation .....	21
<b>4.</b>	<b>OPERATION SECTION .....</b>	<b>22</b>
4.1	Description of the controls .....	22
4.2	Operating cycle .....	23
4.3	Emptying the container .....	24
4.4	Inserting and locking the refuse collection container - not applicable .....	26
4.5	Storage - decommissioning .....	26
<b>5.</b>	<b>MAINTENANCE SECTION .....</b>	<b>27</b>
5.1	Information notes .....	27
5.2	General safety regulations .....	28
5.3	Replacing the filter .....	29
5.4	Replacing the filter cartridge - not applicable .....	31
5.5	Positioning the thermal relay and fuses - not applicable .....	31
5.6	Troubleshooting .....	32
5.7	Scrapping .....	33

This document is exclusive property of DEPURECO S.r.l. Full or partial reproduction by any means (graphic, electronic, etc.) is prohibited without prior authorisation by the Company Management.



## 1. INFORMATION SECTION

### 1.0 Preface

Dear Customer

Congratulations on purchasing a RAM series DEPURECO vacuum. Thank you for choosing us.

We have prepared this manual to allow you to fully appreciate the qualities of this machine.

We recommend reading it carefully before using it for the first time.

It includes information, recommendations and important warnings concerning the use of the vacuum, which will help fully exploiting the technical properties of your machine.

We recommend reading carefully the messages, warnings and indications preceded by the following symbols:



**for personal safety;**



**for vacuum integrity;**



**for environmental protection.**

This vacuum has been designed to extract oils, refrigerants, emulsions and shavings and reintroduce the filtered liquids into the machine tool. It is equipped with an electric level switch, which stops extraction when the level of liquid reaches the set limit.

The vacuum is installed on sturdy casters, of which two are equipped with a brake to hold it in place.

This manual describes the following models:

**RAM 280**

**RAM 500**

**RAM 1000**

This manual provides all the necessary information for the use and maintenance of your vacuum.

This specific model has undergone strict testing to ensure maximum reliability. Its operation and durability will depend on proper use and maintenance.

This manual is integral part of the vacuum and must accompany it at all times, until its demolition.

In the event it is lost or damaged, you can request another copy from DEPURECO S.r.l. (hereafter simply called DEPURECO).

The technical information contained in this manual is exclusive property of DEPURECO and must be considered confidential.

Reproduction, even partial, of graphics, text and illustrations is prohibited by law.

Some details shown in the figures in this manual can differ from those on your vacuum; this is because some components can be removed or replaced to ensure maximum clarity.

For easier consultation, this manual is divided into sections that are identified by a specific graphic symbol.

---

The topics covered in this manual are those expressly required by Machinery Directive 2006/42/EC and the technical data are taken from the technical file archived at DEPURECO.

In compliance with Regulation 1907/2006/EC (REACH), DEPURECO declares that its products do not contain any Substances of Very High Concern (SVHC) included in the Candidate List.

This manual must be kept in a place that can be easily accessed by the personnel in charge of running and maintaining the machine.

Any dispute will be heard by the Court of Turin (Italy).



**This manual must accompany the vacuum even in the event it is sold!**



## 1.1 identification of the main parts



1. Handle
2. ON/OFF switch
3. Cover
4. Filter chamber
5. Liquid waste container
6. Mouldpiece for suction tube insertion
7. Discharge hose connection
8. Swivelling wheels
9. Fixed wheels

## 12 Options

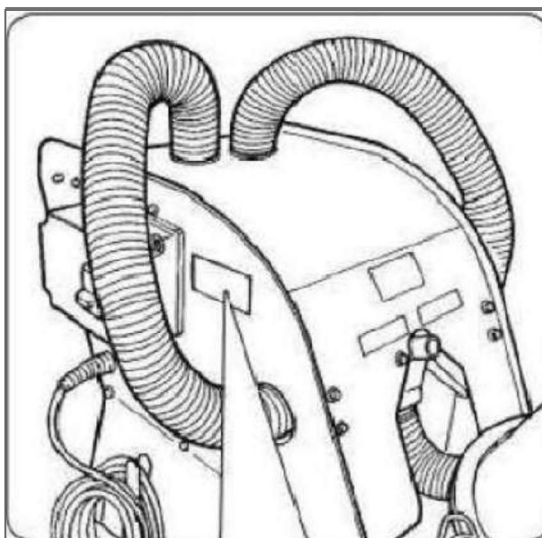
DEPURECO provides a wide range of optional accessories, according to the application of the vacuum.

## 13 Manufacturer's identification data

DEPURECO INDUSTRIAL VACUUMS S.r.l.  
C.so Europa, 609 — 10088 Volpiano (TO) — Italy  
Tel. +39 011 98 59 117  
fax +39 011 98 59 326  
e-mail: [depurecodepureco.com](mailto:depurecodepureco.com)  
website: [www.depureco.com](http://www.depureco.com)

### 1.4 Identification plate

The data on the vacuum identification plate must be referred to in any communication with the manufacturer or the dealer.



DEPURECO S.r.l				C.so Europa, 609 Volpiano (TO) 10088 - ITALY Tel. 039 011. 98. 59. 117 Fax. 039 011. 98. 59. 326 MADE IN ITALY	
Moll		Volt		31	
Serial N.	kW	Amp.			
Dust Class	IP	Ed	year		

### 1.5 Intended use

This model has been designed, manufactured and protected solely for professional industrial extraction of non-flammable and non-toxic oil, refrigerants, emulsions and shavings and for reintroducing the filtered liquid into the machine tool.

Any other use is considered IMPROPER.

### 1.6 Allowed environmental conditions

To ensure proper operation, the vacuum must be protected from weather agents (Rain, hail, snow, fog, suspended powders, etc.) at a room temperature ranging between 5 and 45 °C and a humidity below 70%. The work environment must be clean, suitably lit and must not give rise to explosive atmosphere.



## 17 Noise level

Photometric tests carried out on these specific models have shown a sound pressure level of

RAM 280 RAM 500	72 dB(A)
RAM 1000	76 dB(A)



### Attention!

For sound pressure levels above 85 dB(A), exposed workers must wear suitable personal protective equipment (PPE), such as type-approved individual hearing protection.



Under these conditions, workers must be provided with adequate training and information on risks arising from noise exposure.

## 1.8 Technical data

		280	500	1000
POTENZA / POWER	kW	2,2	4,3	5,5
DEPRESSIONE / VACUUM	mBar	280	420	480
PORTATA D'ARIA / MAX AIR FLOW	mc/h	220	320	320
TENSIONE / VOLTAGE	V-Hz	400   50/60		
CAPACITA' SERBATOIO / BIN CAPACITY	L	280	500	1000
CONTENITORE SOLIDI / SOLID BIN CAPACITY	L	40		
BOCCA ASPIRANTE / INTAKE OPENING	mm	50		
TEMPO DI ASPIRAZIONE / SUCTION TIME	L/sec	280/80	500/120	1000/200
TEMPO DI SCARICO / DUMPING TIME	L/sec	280/80	500/120	1000/200
LIVELLO SONORO / NOISE LEVEL	dB(A)	72	72	76
PESO / WEIGHT	Kg	220	220	250
DIMENSIONI / DIMENSIONS	cm	70x145x140	60x151x178	95x185x245



## 1.9 Warranty

DEPURECO guarantees this model for 12 months from the date of purchase indicated in the receipt upon delivery of the product from the dealer.

The warranty is null and void in the event that the vacuum is repaired by unauthorised third parties, equipment, accessories or components not supplied or not authorised by DEPURECO are used or the serial number is removed (during the warranty period).

During the warranty period, DEPURECO undertakes to repair or replace free of charge parts and components, which prove to have manufacturing defects.

Repairs are made solely at our premises or in specific Service centres and must be delivered ex works (transport costs are charged to the purchaser, unless otherwise agreed upon).

The warranty does not cover cleaning of operating elements.

The purchase receipt must be shown to the authorised technical personnel carrying out the repair and must accompany the vacuum during its shipment.

Defects that are not evidently due to materials or manufacturing will be examined solely at our premises or at a specific Technical Service Centre.

Should the complaint be unjustified, all repair and/or replacement expenses shall be charged to the purchaser.

In any event, the following are not covered by warranty: accidental damage due to transport, negligence, abnormal use, improper use, non-compliance with the instructions contained in this booklet or arising from phenomena that do not depend on normal use/operation of the vacuum.

DEPURECO shall not be held liable for any injuries to persons or damage to objects caused by misuse or improper use of the vacuum.

Any dispute will be heard by the Court of Turin (Italy).



Protect your purchases by joining the exclusive "warranty plus" program

Go to [www.depureco.com](http://www.depureco.com),  
fill in the form to extend the warranty  
up to 24 months.



## 2. SAFETY SECTION

### 2.1 Information on safety



In compliance with Italian Legislative Decree 81/08 and subsequent additions and amendments, the Safety Manager is obliged to educate, inform and train workers on the risks related to the use of the vacuum, in order for them to be able to protect their own and others' safety.

Failure to comply with basic safety standards and precautions can cause accidents during use, maintenance and repairs of the vacuum. Accidents can frequently be avoided by recognising potentially hazardous situations before they occur. Adequate training is crucial to this end.

DEPURECO shall not be held liable for accidents or damage due to the improper use of the vacuum by untrained personnel or to failure to comply, even partially, with the occupational safety standards and intervention procedures contained in this manual.

Safety warnings and precautions are indicated in this manual as well as on the product itself. Operators must pay special attention to these hazard warnings to prevent accidents with serious consequences for themselves and other people.

Safety messages are emphasised by the following symbol:



#### **Attention!**

**Failure to comply with these messages can cause injuries to the operator.**



#### **Attention!**

**Failure to comply with these messages can cause damage to the vacuum.**

**Attention! Failure to comply with these messages can cause damage to the**

**environment.** DEPURECO designs and manufactures its equipment and accessories with

care, identifying and

compensating possible risks related to their use. In the event that equipment, procedures, work methods or techniques not expressly provided for by DEPURECO are used, it is crucial to ensure beforehand that there are no dangers for oneself and the others, notwithstanding that DEPURECO shall not be held liable.



#### **Use only original DEPURECO replacement parts**

Depureco declines all responsibility  
for the use of non-original spare parts.



---

## 2.2 Safety requirements



### Attention!

The indications below are important to prevent hazards that can occur while operating the vacuum. However, they cannot replace the expertise and common sense of the operators as an overall framework for accident prevention. Every section lists further safety requirements specific for the various operations.

# CAUTION!

- This vacuum can only be used by adequately trained adults.
- This vacuum is suitable for industrial use, such as: factories, warehouses, workshops.
- The equipment must be electrically connected to a mains equipped with efficient earthing.
- Always lock the vacuum by means of the lock located on the swivel casters during vacuum operation.
- This vacuum is not intended to be used in corrosive or explosive environments.
- Keep the vacuum clear from foreign bodies, such as debris, oil, tools and other objects that could damage its operation and cause injuries.
- Avoid using flammable or toxic solvents, such as petrol, benzene, ether and alcohol for cleaning operations.
- Avoid prolonged contact with solvents and inhaling their vapours.
- Avoid using it in the proximity of naked flames or heat sources; ensure suitable ventilation.
- Do not vacuum lighted cigarette butts: they could burn the filter.
- Do not vacuum petrol or flammable liquids in general.
- Ensure that all the guards and protection devices are in place and that all the safety devices are properly installed and efficient.
- Do not use the vacuum on sloping or uneven floors.
- Do not wear loose or baggy clothing, such as ties, scarves, ripped clothes that could get easily caught or trapped in the vacuum.
- Do not open the refuse collection container while the vacuum is operating.
- Do not move the vacuum by pulling the power cord.
- Extensions, press-fit plugs and adapters are prohibited.
- Do not remove the cover while the vacuum is operating.
- Do not climb on the vacuum.
- Do not touch electric wires, switches, buttons, etc., with wet hands.
- Periodically verify the integrity of the power cord.



- While using the industrial vacuum, some components can reach 116 °C, e.g.: motor terminal block, motor body.
  - During the operations to restore original work conditions, the personnel in charge must ensure at the end of the procedure, normal operating and safety conditions of the vacuum and, in particular, of the safety devices and protective guards involved in the operation.
  - In the event that the Customer installs a tool not supplied by DEPURECO on the vacuum, it is essential to verify that the safety requirements of Machinery Directive 2006/42/EC are met, notwithstanding that DEPURECO shall not be held liable for problems caused by the use of that part.
  - Structural damage, alterations or improper repairs can modify the protective capacity of the vacuum, thereby nullifying this certification and releasing DEPURECO from any liability.
  - This manual must always be kept at hand for consultation on the operating cycle and for clarifying any doubts.
- In the event it is lost or damaged, request another copy from DEPURECO.



**Attention!**

**This vacuum can contain harmful liquids/debris.**

**Emptying and maintenance procedures, including the disposal of the refuse collection containers, must be carried out only by specialised personnel wearing suitable personal protective equipment.**

**Do not activate without a complete filtering system.**

## 2.3 Safety plates and symbols

Plates with safety symbols and messages are applied to the vacuum and its packaging. These pages show their precise location and the nature of the hazard.



**Attention!**

**Ensure that all safety messages are perfectly legible.**

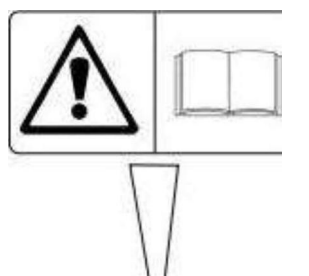
**Clean using them a cloth with water and soap. Do not use solvents, naphtha or petrol.**

**Replace damaged plates requesting them from DEPURECO.**

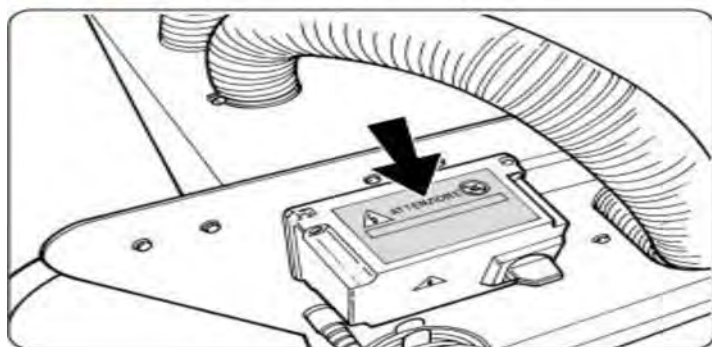
**In the event that a plate is located on a piece that is replaced, ensure that a new plate is affixed to the new piece.**

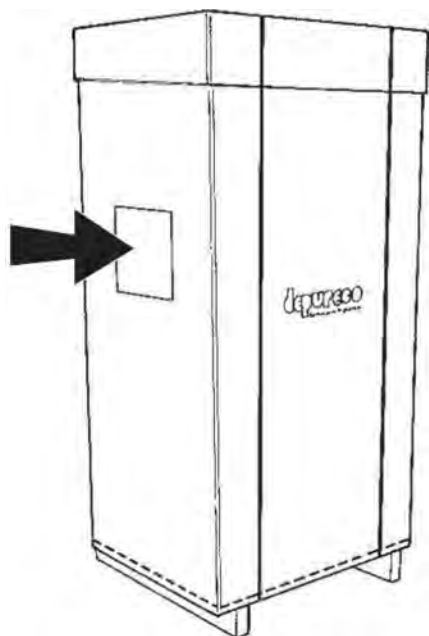






**Attention!**  
Carefully read this use and maintenance manual before using the vacuum or carrying out maintenance interventions.





**Attention!**  
**Carefully read the instructions on the packaging before handling and unpacking the vacuum.**

## 2.4 Residual risks

The accurate risk analysis carried out by DEPURECO (archived in the technical file) has allowed eliminating the main risks related to the conditions of use of the vacuum.

DEPURECO recommends complying with the instructions, procedures and recommendations in this manual and with the safety standards in force. DEPURECO also recommends using suitable personal protective equipment as well as the protection devices integrated in the vacuum.

The residual risks analysed on the vacuum and/or its components can be:

### **Electrical risks during maintenance on live parts**

Pursuant to Italian Legislative Decree 81/08 — articles from 80 to 87 — it is prohibited to operate on live parts, notwithstanding the exceptions set forth by said Legislative Decree.

### **Risk of improper use in presence of liquid, explosive and flammable substances**

The vacuum must not be used in environments containing liquid substances or liquids that can evaporate at room temperature, flammable powders and gas.

### **Risks related to operation in humid environments**

Comply with the limitations indicated in this manual, in section 1.6 "Allowed environmental conditions".

### **Risks of misinterpretation of safety pictograms**

With reference to risk analysis and identification, DEPURECO has installed hazard labels on the vacuum, in compliance with the standard concerning graphic symbols.

The user must immediately replace any safety plate made illegible due to wear or damage.



---

**Attention! It is strictly prohibited to remove the safety plates from the vacuum and/or its components and packaging.  
DEPURECO shall not be held liable for the vacuum's safety in the event of failure to comply with this prohibition.**



## 2.5 Applied Directives

The following Directives apply to the vacuum described in this manual:

- 2006/42/EC Machinery Directive
- 2014/30/EU Electromagnetic Compatibility Directive

Reference standards, including their binding requirements, are managed through the DEPURECO Quality and Environmental Management System.

---

---



---

### 3 HANDLING, UNPACKING AND INSTALLATION SECTION

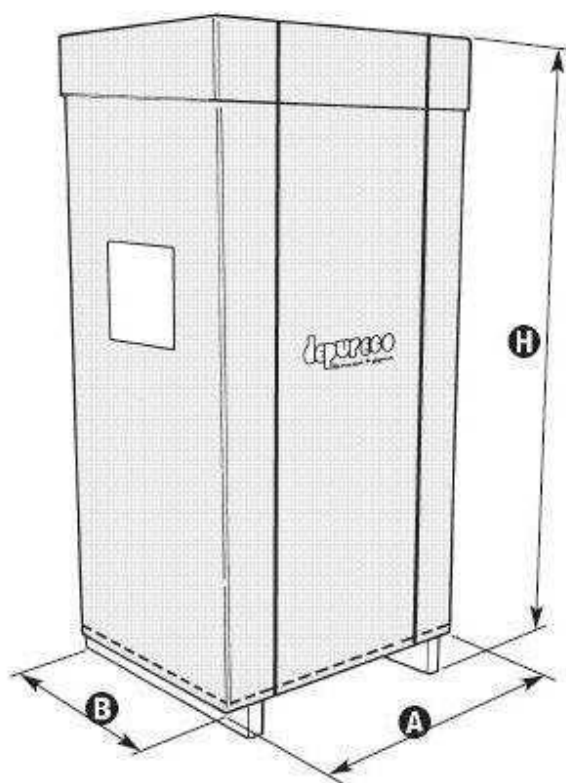
#### Handling

Attention!

**W**) The instructions for transporting and unpacking the vacuum correctly are shown

also on the packaging. The instructions below also include the operations to be carried out in the event that the vacuum must be packed or unpacked again for subsequent transport.

Dimensions of the packed vacuum.



	A	B	H
RAM 280	75 cm	145 cm	160 cm
RAM 500	90 cm	170 cm	225 cm
RAM 1000	100 cm	190 cm	250 cm



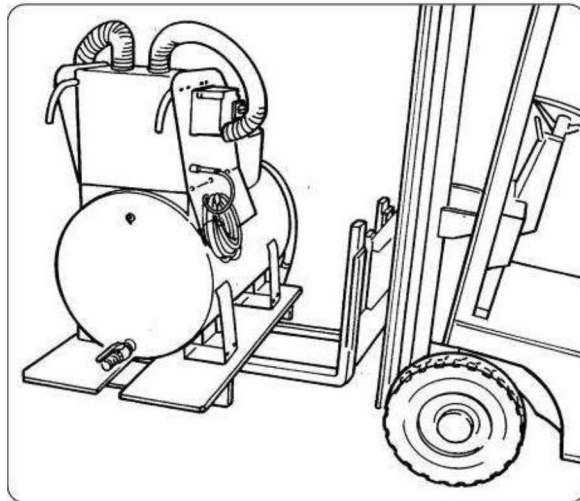
The vacuum must be lifted and handled only using a forklift whose load bearing capacity is suited to the weight.

When using a forklift, lift the load 200 mm off the ground and swing backwards.

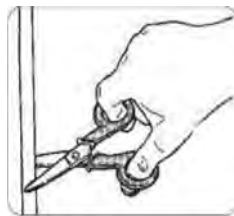
Always keep the height of the working environment in mind when lifting loads.

Before starting any movement, ensure that the area is cleared and that there are no moving objects on the packaging.

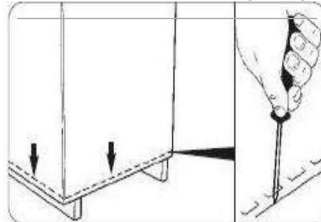
For lifting and handling operations, comply with the occupational safety standards in force and with the normal forklift driving instructions.



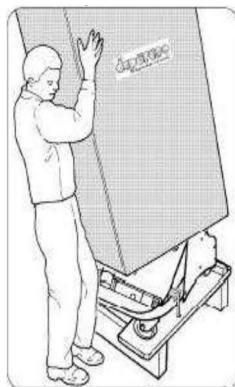
### 3.2 Unpacking, assembling the casters and the exhaust pipe



- Cut and remove the two fastening straps from the case

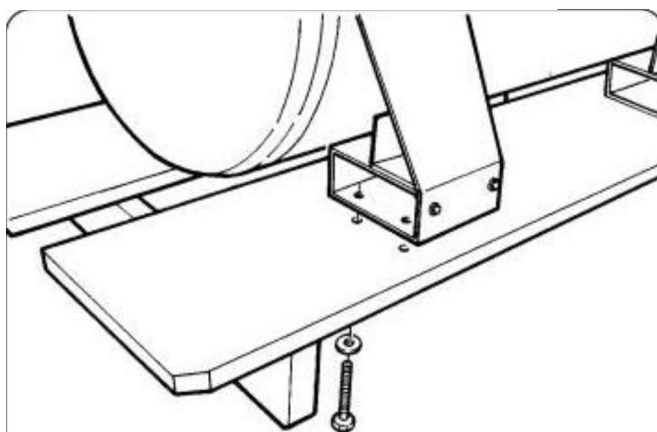


- Using a screwdriver, remove the points that fix the cardboard case to the pallet



- Completely remove the case

- Upon removing the protective wrapping, loosen and remove off both sides the screws that fasten the machine to the pallet



**The cardboard (or nylon) packaging is recyclable and should be collected separately to prevent environmental impact.**

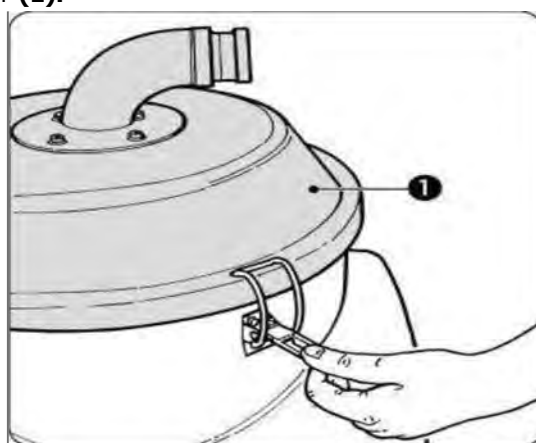


**Attention!**

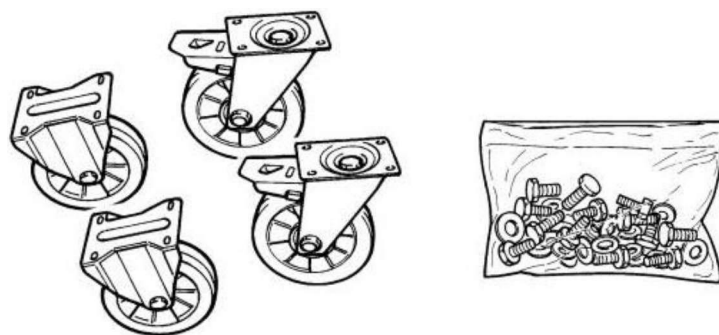
**Keep the pallet and the fastening screws.**

**In the event of subsequent transport, the vacuum must be secured to the pallet using the same fastening system.**

- Detach and remove the cover **(1)**.



- Extract the four casters and the bag containing the fastening screws.  
Close and attach the cover.

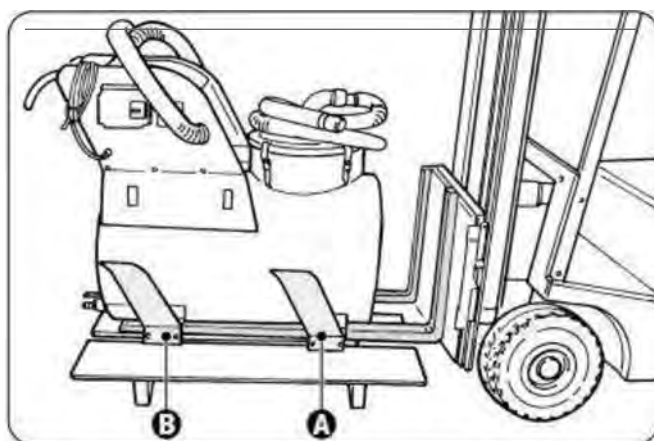


**Attention!**

The following operation must be carried out on a level surface and solely by a qualified forklift operator and a second operator.

**Warning!**

Insert the forks of the forklift into the slots (A) and (B) - see figure.



**Attention!**

The forks must fully enter and protrude at least 20 cm from the housing (B) at the end.

– Lift the vacuum approximately 1.5 m.

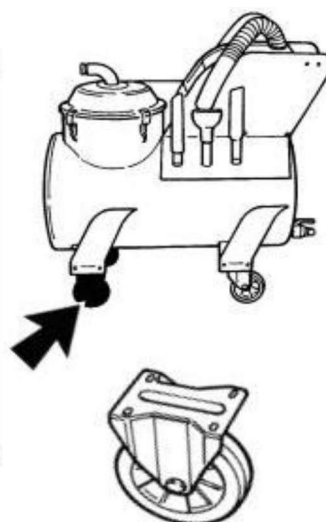
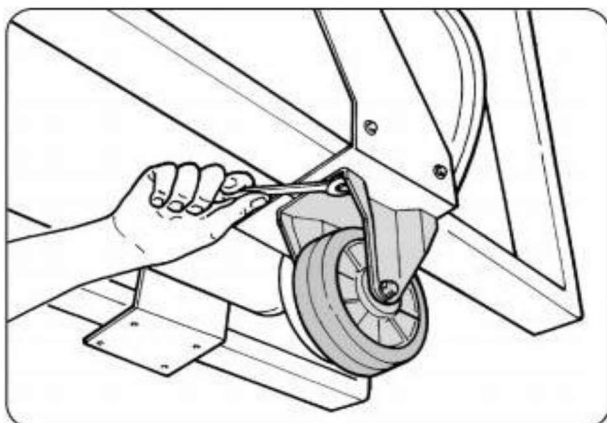


**Attention!**

Lock every forklift movement, switch it off and pull the handbrake. The forklift operator must monitor while the second operator operates.

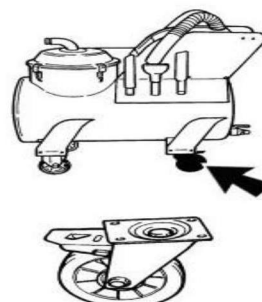
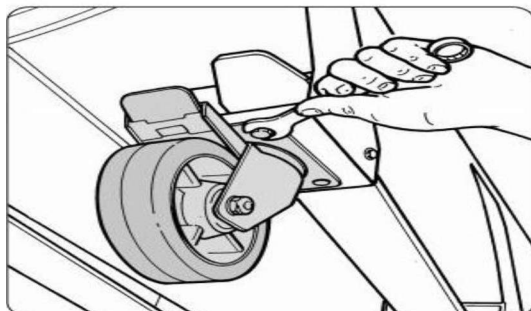
– Install the two fixed casters on the side indicated in the figure.





**Attention!**  
**The second operator must operate outside of the forklift.**

- Install the two swivel casters on the opposite side as shown in the figure.

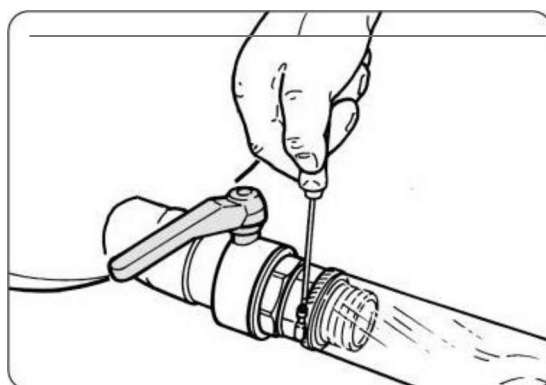


Finally, lower the vacuum.



**Attention!**  
**Do not stand under the vacuum while it is being lowered.**

- Insert the exhaust pipe into the inlet port and lock it in place using a clamp.



### 3.3 Installation



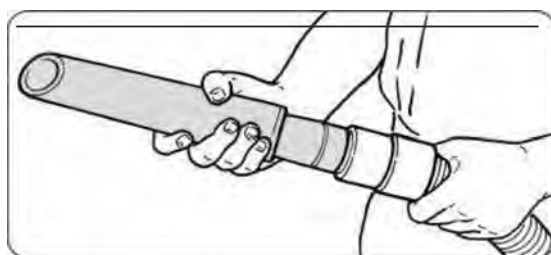
#### **Warning!**

**Before installing the vacuum, it is important to carry out a thorough preventive visual inspection to identify any damage occurred during transport.**

In the event that one or more components are damaged, do not continue with installation and inform DEPURECO about the anomaly and agree upon the actions to be taken.

The vacuum is already equipped with a suction filter to retain the solid elements in the extracted

liquid. - Insert the accessory according to the type of extraction on the opposite side of the hose.



Contact your dealer (or DEPURECO) for information regarding the various types of OPTIONAL that can be used on this specific model.

- Insert the suction pipe into the inlet port located on the cover and secure the clamp.

#### **The following operation must be carried out by a qualified electrician.**

Ensure that the power supply line corresponds to the voltage and frequency indicated on the identification plate and that it is efficiently earthed.

Tel. 011/98.5				100E8 Volplants	
DEPURECO. c so Europa.				Fax 011,98.59.326	
1 2 = 2 0				IN HMI	
Mod.			Volt		% 1 1 1
Serial N°	kW	Amp	Hz Y e a		
Dust class	IP	Kg			

The socket to power the vacuum must be protected by a mains disconnect switch in compliance with EC standards.

Insert the plug (standard supply) into the socket.



#### **Attention!**

**So not insert the plug into the socket with wet hands.  
The use of extensions is not allowed.**

If necessary, contact the DEPURECO customer service for further information.

---

## 4 OPERATION SECTION

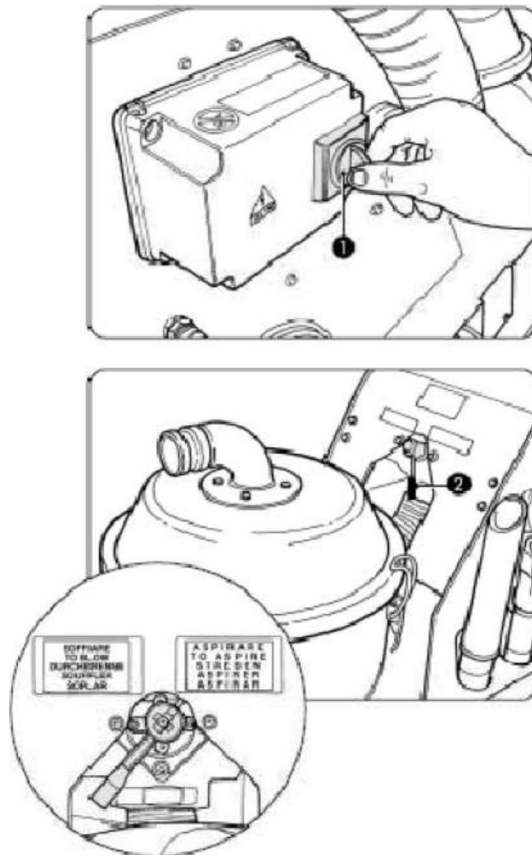
### 4.1 Description of the controls

**Attention!**

The vacuum can be used solely by authorised personnel after having read these use and maintenance instructions.

The user of the equipment and the maintenance technician, who carry out interventions

on the vacuum, must be adequately educated, informed and trained, in compliance with the occupational safety standards in force and, during the various operations, must wear personal protective equipment (PPE), such as safety footwear, gloves, protective goggles, mask, etc. The user must comply with the provisions in force concerning extracted materials and their disposal.



1) General ON / OFF switch

2) BLOWING / SUCTION lever

---

## 4.2 Operating cycle

Ensure that the power cord is intact and in perfect state.



**Attention!**

**Before inserting the plug, ensure that the voltage of the power supply line corresponds to that indicated on the identification plate.**

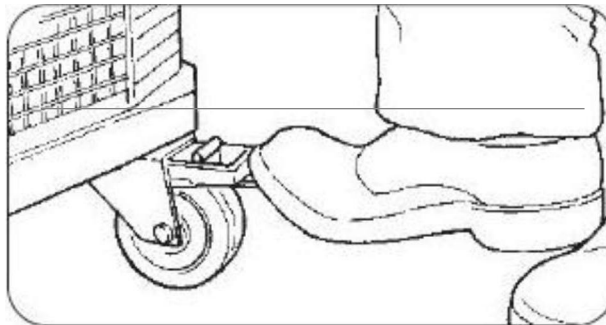
Ensure that the power plug is inserted correctly into the socket.

Ensure that the hose is inserted properly and locked into the suction inlet.

Ensure that the lever **(2)** is in "VACUUM" position.

Ensure that the refuse collection container is properly locked to the vacuum.

Block the vacuum using the brakes on the swivel casters, as shown in the figure.



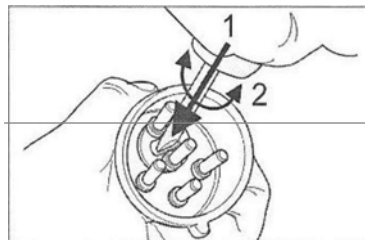
**Attention!**

**Do not shift the vacuum while it is operating.**

Hold the end of the hose with the chosen accessory.

Turn the master switch **(1)** to "I" - and start vacuuming.

If, upon switching the machine on, the hose blows instead of vacuuming, switch the machine off by turning the master switch **(1)** to "0", unplug it and reverse the pins on the plug using the dedicated inverter.



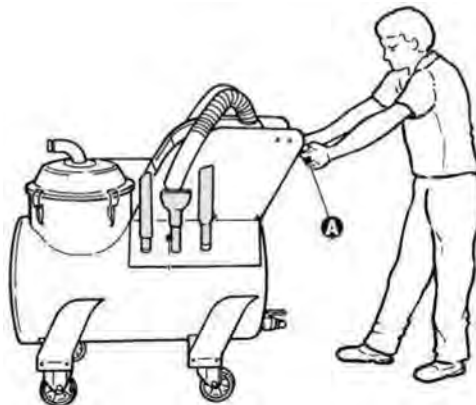
---

**Warning!**

**Before turning the vacuum on again, ensure that the pump has fully stopped.**

Upon completing this operation, turn the master switch (1) to "0"

Use the handles **(A)** to move the vacuum — see figure



**Warning!**

**During operation, prevent the hose from rolling up or bending**

### 4.3 Emptying the container



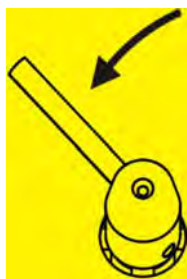
**Attention!**

**Wear PPE (gloves, dust mask, goggles, etc.) during this operation**

When the container is full, the level sensor will automatically turn the vacuum off.

To empty the container, proceed as follows:

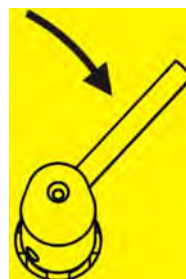
- as previously mentioned, the vacuum is locked by the levers located on the swivel casters
- bring the lever indicator to "BLOW"



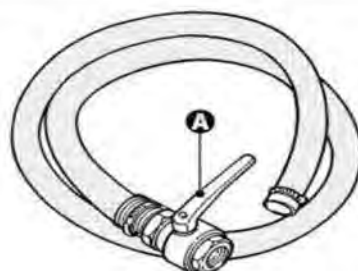
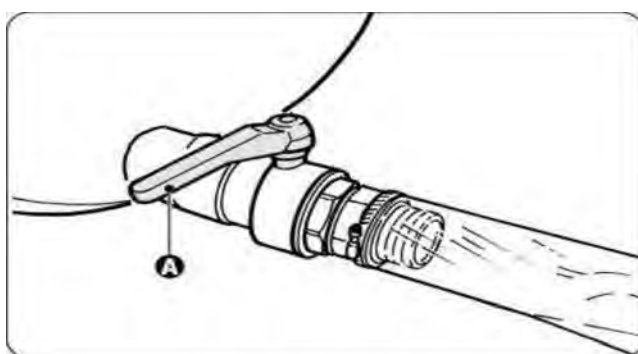
SCARICO  
DISCHARGE  
VIDAGE  
ENTLEERUNG  
DESCARGA



ASPIRAZIONE  
SUCTION  
ASPIRATION  
ABSAUGEN  
ASPIRACION



reach the discharge area and **before starting the machine** open both the inlets by means of the levers (A) — machine outlet and exhaust pipe end.



#### Attention!

Waste must be disposed of in compliance with the standards in force in the country of use — for Italy with Legislative Decree 152/2006 and subsequent amendments and additions.

---

#### 4.4 Inserting and locking the refuse collection container — not applicable

#### 4.5 Storage - decommissioning

Remove the filter and clean it; empty the refuse collection container and store the vacuum in a place protected against weather agents with the temperature ranging between 5 and 45 °C and cover it with a nylon tarp to protect it against dust.



*In case of doubt, do not interpret!  
Call immediately your dealer!*



## 5 MAINTENANCE SECTION

### **Attention!**

**Special vacuum maintenance must be carried out solely by specialised technicians authorised by the DEPURECO dealer.**

### 5.1 Information notes

This section describes the verifications and routine maintenance operations required to ensure proper vacuum operation.

Maximum reliability and minimum maintenance costs are the result of a planned maintenance and inspection schedule carefully followed throughout the entire lifespan of the vacuum.

Observe the set maintenance intervals and schedule the interventions according to specific requirements in relation with the vacuum production cycle.

Always use tools that are in perfect state and that are specifically intended for the operation to be carried out; the use of inadequate or inefficient tools can cause serious damage.

Any other intervention required to eliminate faults or malfunctions must be expressly authorised by the manufacturer.

In these cases, always communicate the vacuum identification data - see para 1.4 of this manual.

For important repairs, refer to the authorised dealer, whose specialised personnel has the technological expertise and is always available for prompt interventions.

As for interventions carried out by the user, the vacuum must be disassembled, cleaned and maintained, where possible, in such a way as to prevent hazards to the maintenance personnel and to third parties. Suitable precautions include decontamination prior to disassembly, forced filtered ventilation of the room where the equipment is disassembled, cleaning the maintenance area and wearing suitable personal protective equipment.

Once every three months (or more frequently, according to the operating cycle and the conditions of use), the manufacturer or a qualified technician must verify the filter, ensuring that it is not damaged, the tightness of the systems (air / liquid) and proper operation of the control devices.

Should maintenance operations or repairs be carried out, all contaminated objects must be adequately cleaned, placed in waterproof bags and disposed of in compliance with the standards in force.





## 5.2 General safety regulations

### Attention!

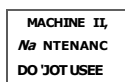
All the operations described must be carried out with the vacuum unplugged.



Before starting any maintenance or cleaning operation, wear suitable PPE (protective clothing, goggles and/or gloves, etc.) according to the work to be done.

/0.

Place a sign on the vacuum with the message:



**"MACHINE UNDER MAINTENANCE  
DO NOT START"**



Before resuming operation, verify the entire system according to start-up procedures. Run a few trial operating cycles after every maintenance operation to ensure proper machine operation.

Failure to comply with these precautions can cause serious injuries to the personnel.

Maintenance operations must be carried out by trained technicians specialised in the following sectors:

- Mechanical maintenance
- Electrical maintenance

It is the Safety Manager's duty to ensure the professionalism and skills of these technicians.

**Before starting any maintenance operation, the Safety Manager must:**

– Keep unauthorised personnel out of the work area.



- Ensure that the necessary tools are in good conditions and readily available to the maintenance technician.
- Ensure that the maintenance technician is equipped with the personal protective equipment required for the specific operation (gloves, goggles, shoes, mask, etc.).
- Ensure that the maintenance technician has carefully read the instructions contained in this manual and knows the operation of the vacuum and its components perfectly well.

– Ensure that there is enough light and, if necessary, provide 24 Volt torches.

**Before starting any maintenance operation, the Maintenance technician must:**

– disconnect all power supplies and safely lock the vacuum.



### Attention!

Should it be absolutely necessary to operate with the power supply on, where provided by Italian Legislative Decree 81/08, the maintenance technician must keep a safety distance, have the emergency stop buttons at hand and must never place his hands between the refuse container and the vacuum.

Upon completing the intervention and before starting up again, the maintenance technician must verify the efficiency of the safety devices and the integrity of the protective guards.

Interventions on the motors or on other electrical components must only be carried out by the specially trained electrical maintenance technician authorised by the Safety Manager.



**Attention!**

**After every maintenance operation, the Safety Manager is obliged to ensure the safety conditions of the vacuum and its protection devices.**

**Before every work shift**

- Ensure that the power cord and plug are not damaged: replace the power cord immediately at the slightest sign of wear with one of the same type (refer to DEPURECO for information). This operation must be carried out only by a qualified electrician.
- Ensure the integrity of the safety symbols (pictograms) applied to the vacuum.
- Ensure that the liquid collection container is empty.
- Ensure the efficiency of the filter (it must not be perforated).
- Ensure the integrity of the suction hose and of the accessories to be used.



**Attention!**

**A perforated hose reduces suction/blowing power and disperses liquids in the environment.**

## 53 Replacing the filter

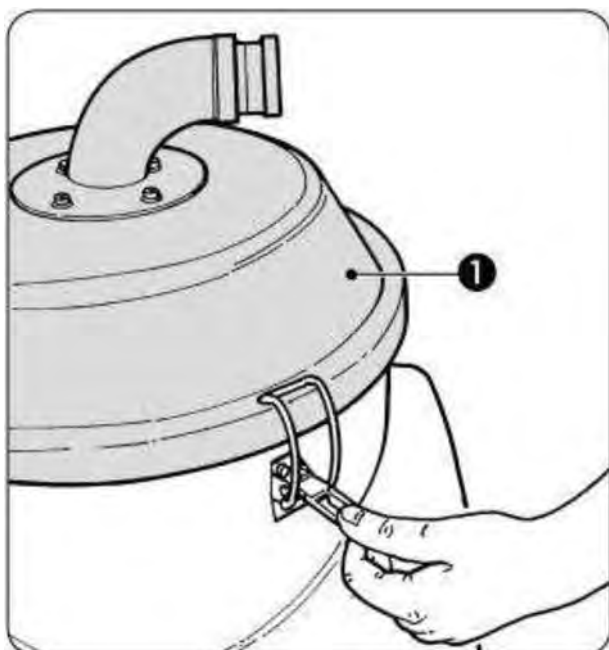
To replace the filter, proceed as follows:

1. switch the machine off by turning the master switch (1) to "0"
2. unplug the vacuum



**Attention!**

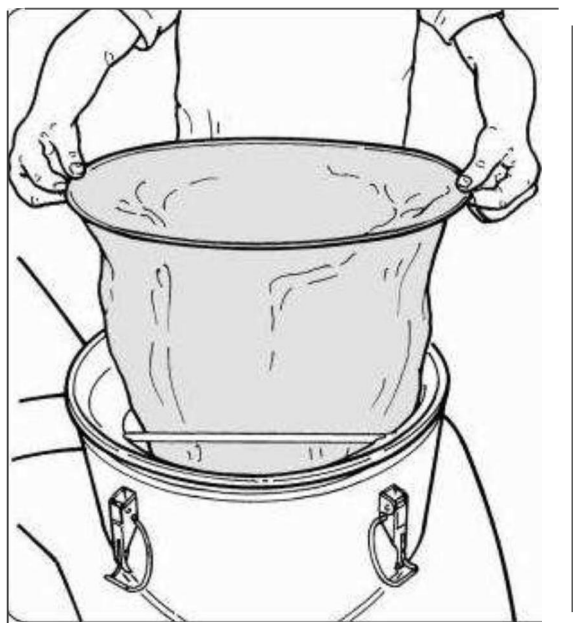
**Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).**



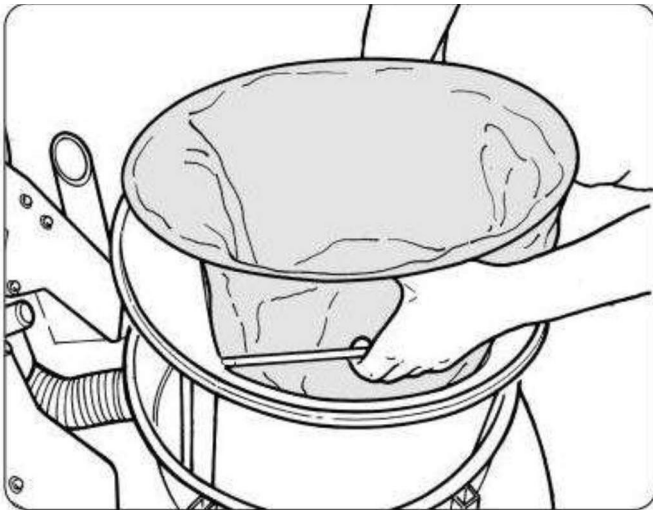
3. detach the cover (1)



4. remove the cover

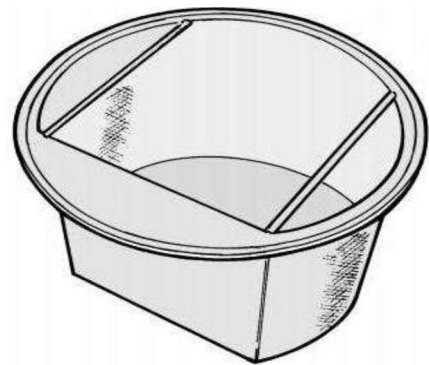


5. remove the filter and replace it with a genuine spare part
6. in the event of debris inside the filter or perforated filter, lift the filtering unit from the handles, remove the filter and clean the filter holder.



8. rinse the filter holder, insert the new fabric filter (tnt) and reassemble everything inside the compartment; then

9. hook the cover back on - follow the previous instructions.



**USE ONLY GENUINE DEPURECO FILTERS**

**5.4 Replacing the filter cartridge - not applicable**

**5.5 Positioning the thermal relay and fuses - not applicable**



## 5.6 Troubleshooting

ANOMALY DETECTED	POSSIBLE CAUSE	RECOMMENDED SOLUTION
The vacuum does not start up	- No power supply	<ul style="list-style-type: none"><li>- Ensure the presence of voltage in the socket</li><li>- Ensure the integrity of the plug and of the power cord</li><li>- Contact the DEPURECO technical assistance service</li></ul>
Liquid leakage	- Perforated suction hose	- Replace the hose
	- Perforated blowing hose	- Replace the hose
	- loose suction hose clamp	- Tighten the clamp
	- Defective ball valves	- Replace the ball valves



### Attention!

In the event of any anomaly, read the notes in paragraph 5.1 and 5.2 of this manual before intervening.

If necessary, contact the DEPURECO customer service for further information.

Failure to comply with these precautions can cause serious injuries to the personnel.



***In case of doubt, do not interpret!  
Call immediately your dealer!***



## 5.7 Scrapping



To prevent damaging the environment in the event of scrapping, all the components of the vacuum must be disposed of responsibly in suitable landfills and in compliance with the standards in force - for Italy, Legislative Decree 152/2006 and subsequent amendments and additions.

Before scrapping the machine, the plastic and rubber materials must be separated from the electrical material.



### **Correct disposal of this product (electrical and electronic waste)**

The electrical and electronic parts of this product must be disposed of in compliance with Italian Legislative Decree 151/2005 and subsequent amendments and additions (Directive 2002/96/EC on WEEE - Waste Electrical And Electronic Equipment)



The parts of the vacuum made of plastic material, aluminium and steel can be recycled in appropriate centres.



***In case of doubt, do not interpret!  
Call immediately your dealer!***

*Signed*



## MAINTENANCE LOG

**INTERVENTION 3**

Date

Technical Assistance

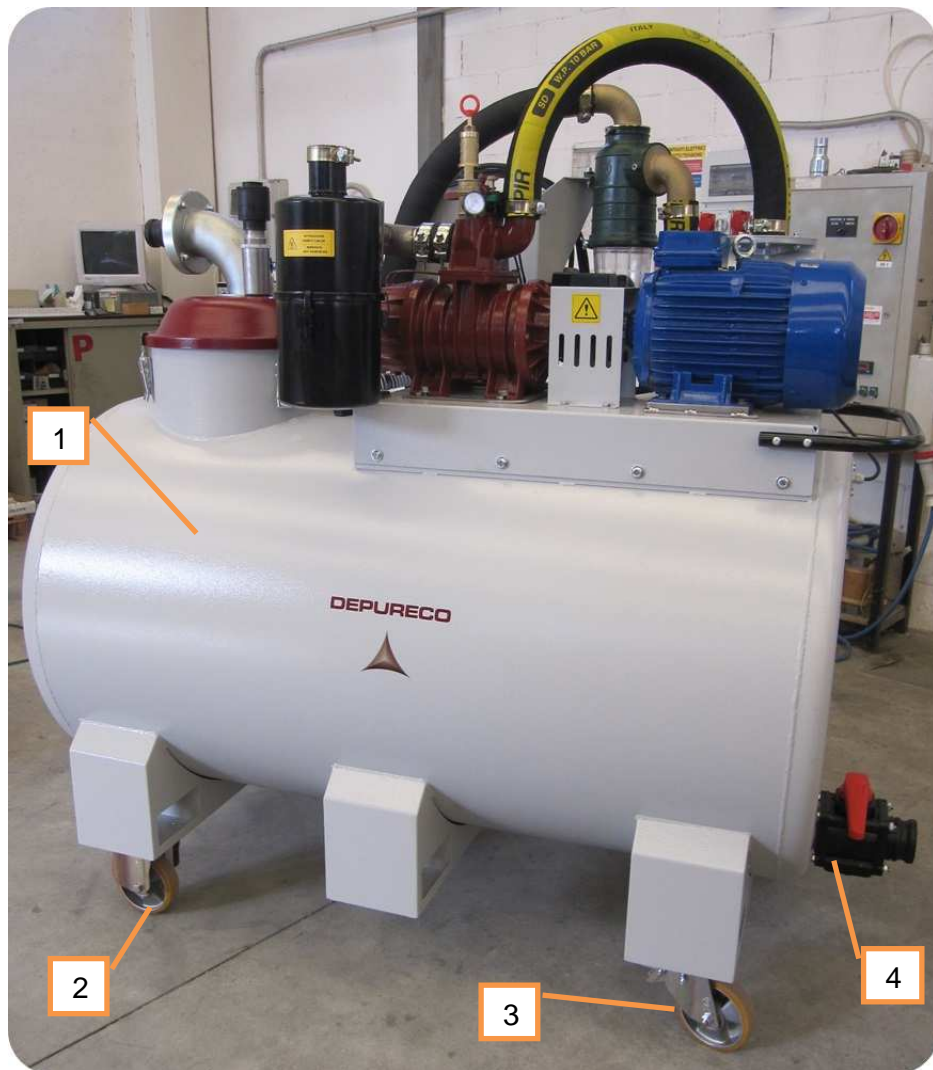
Type of Works

*Signed*

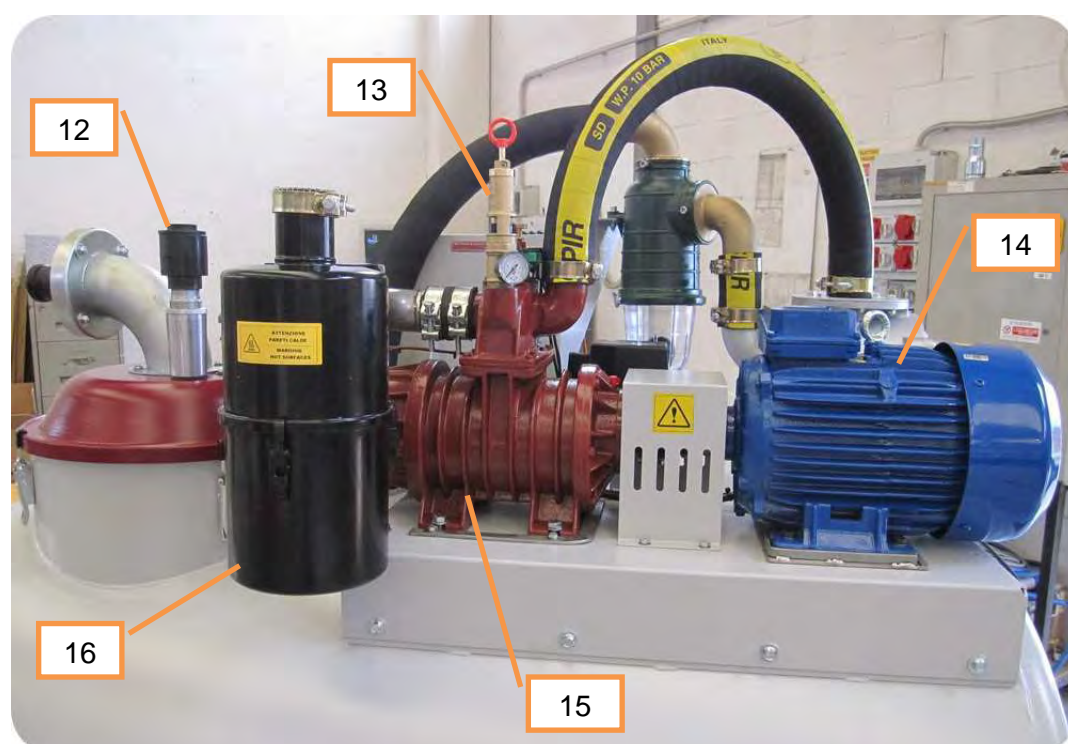
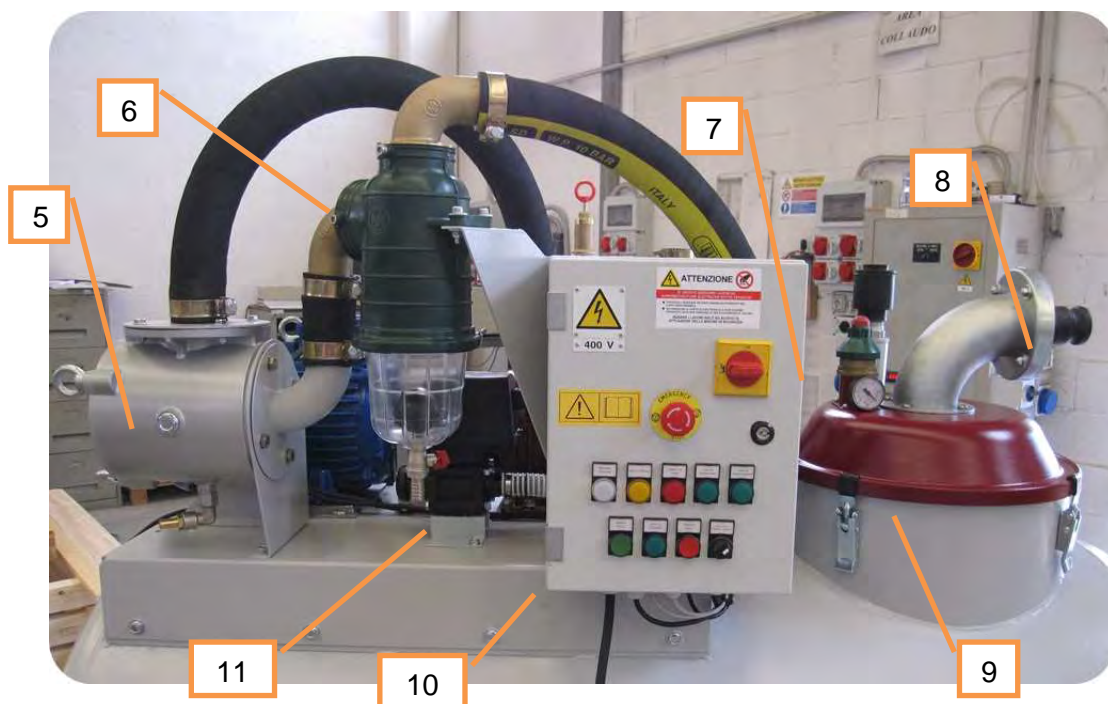


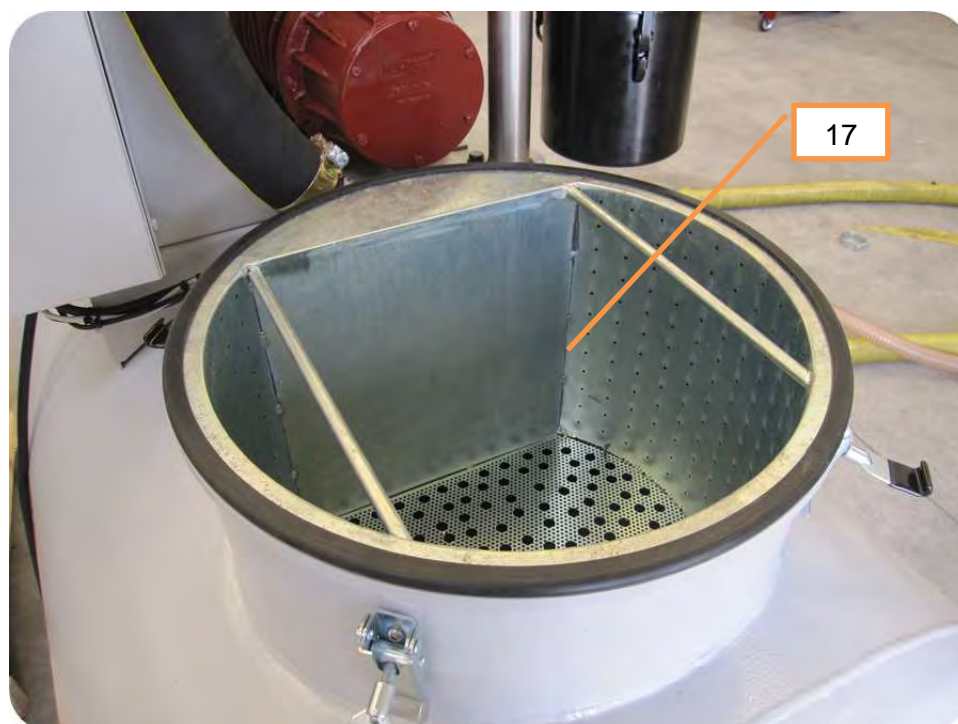
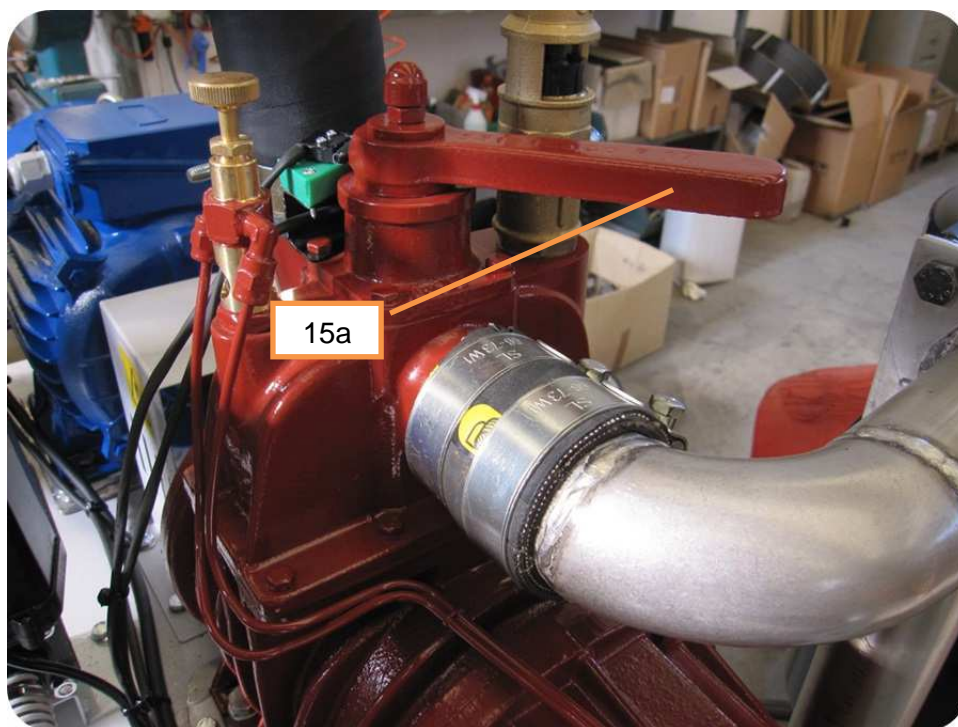
## 1. INFORMATION SECTION

### 1. Identification of the main parts











---

## List of components

1. extracted liquid tank
2. fixed casters
3. swivel casters
4. extracted liquid escape valve
5. air-water filter
6. cleaner
7. vacuum limiting valve
8. suction hose inlet
9. cover
10. control panel
11. pressure reset valve
12. pressure limiting valve
13. pressure limiting valve
14. electric motor
15. pressure reducer
16. separator/silencer filter
17. grilled basket



## 2. Technical data

DATI TECNICI / TECHNICAL DATA		
POTENZA / POWER	KW	5,5
DEPRESSIONE / VACUUM	mbar	900
PORTATA D'ARIA / MAX AIR FLOW	mc/h	300
TENSIONE / VOLTAGE	V - HZ	400   50/60
CAPACITA' SERBATOIO / BIN CAPACITY	L	1000
CONTENITORE SOLIDI/SOLID BIN CAPACITY	L	40
BOCCA ASPIRANTE / INTAKE OPENING	mm	50
TEMPO DI ASPIRAZIONE / SUCTION TIME	L/sec	1000/220
TEMPO DI SCARICO / DUMPING TIME	L/sec	1000/240
LIVELLO SONORO / NOISE LEVEL	dBA	82
PESO / WEIGHT	Kg	460
DIMENSIONI / DIMENSIONS	Cm	94x165x188





## 3. Operation

### 3.1 Control panel





## 3.2 Operating cycle

Ensure that the power cord is intact and in perfect state.



### **Attention!**

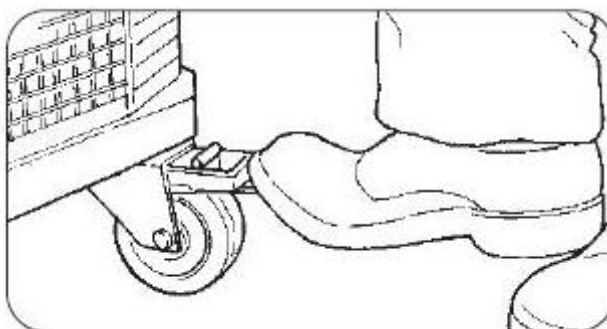
**Before inserting the plug, ensure that the voltage of the power supply line corresponds to that indicated on the equipment's identification plate.**

Ensure that the power plug is inserted correctly into the socket.

Ensure that the hose is inserted properly and locked into the appropriate inlet.

Ensure that the refuse collection gridded basket is properly locked to the vacuum.

Block the vacuum using the brakes on the swivel casters, as shown in the figure.



### **Attention!**

**Do not shift the vacuum while it is operating.**

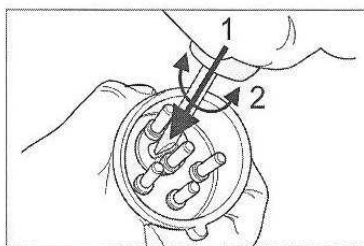


### 3.2.1 Vacuum

1. Insert the plug and turn the cut-out switch to 0
2. turn the operation reversing lever (no. 15a in the figure) and make sure the LEVER IN VACUUM light is on
3. check the operation of the pressure limiting valve (no. 13 in the figure), pulling the red top eyelet upwards to verify the plate lifts without obstruction
4. turn the CYCLE CHOICE selector to VACUUM
5. press the CYCLE START button: the motor starts and the CYCLE IN OPERATION light switches on

If, upon switching the machine on, the hose blows instead of vacuuming,

1. switch the machine off by pressing the CYCLE STOP button
2. wait for the CYCLE IN OPERATION light to switch-off
3. switch-off the control panel by turning the cut-out switch to 0
4. disconnect the plug and reverse poles on the equipment plug by means of the inverter.



**Warning!**

**Before turning the vacuum on again, ensure that the pump has fully stopped.**



**Warning!**

**During operation, prevent the hose from rolling up or bending.**



---

Press the CYCLE STOP button to stop vacuuming. The CYCLE IN OPERATION light remains on for a few seconds during which the pressure reset valve (no. 11 in the figure) opens to balance the pressures inside and outside the tank. The control panel can be disconnected after the light switches off.

It is recommended, before stopping the machine, to extract the suction hose from the liquid for the following reasons:

- any residual depression inside the tank would prolong vacuuming for an indefinite time beyond the intentional stop
- extracting the hose just before allows draining its liquid and avoid accidental subsequent spills.

Upon reaching the maximum level admitted inside the tank, vacuum automatically stops (in this case also with the opening of the pressure reset valve) and the FULL TANK alarm light switches on. It is now only possible to run the machine in draining mode.

### **3.2.2 Draining**

1. Insert the plug and turn the cut-out switch to 0
2. turn the operation reversing lever (no. 15a in the figure) and make sure the LEVER IN DRAINING light is on
3. turn the CYCLE CHOICE selector to DRAIN.
4. open the escape valve (no. 4 in the figure)
5. press the CYCLE START button: the motor starts and the CYCLE IN OPERATION light switches on.

Press the CYCLE STOP button at the end.





## **4. Periodical checks**

Pressure reducer oil levels: for details refer to the use and maintenance manual for the specific model (PN 33 D)

Cleaning the air-water filter: for details refer to the relative technical sheet.

## Summary

<b>1. INFORMATION SECTION.....</b>	<b>4</b>
1.1 Foreword.....	4
1.2 Main parts.....	6
1.3 Optional parts .....	7
1.4 Manufacturer's identification data .....	7
1.5 Identification plate.....	7
1.6 Intended Uses .....	7
1.7 Authorised environmental conditions.....	7
1.8 Noise level.....	7
1.9 Technical data.....	8
1.10 Warranty .....	9
<b>2. SAFETY SECTION .....</b>	<b>10</b>
2.1 Safety information .....	10
2.2 Safety recommendations .....	11
2.3 Safety plates and symbols .....	13
2.4 Residual risks .....	14
2.5 Applied Directives .....	14
<b>3. HANDLING, UNPACKING, AND INSTALLATION SECTION.....</b>	<b>15</b>
3.1 Handling.....	15
3.2 Unpacking .....	15
3.3 Installation.....	17
<b>4. OPERATION SECTION.....</b>	<b>18</b>
4.1 Description of controls.....	18
4.2 Operation cycle.....	19
4.3 Emptying the solid residue container.....	22
4.4 Storage - decommissioning .....	23
<b>5. MAINTENANCE SECTION.....</b>	<b>24</b>
5.1 Informative notes .....	24
5.2 General safety regulations.....	25
5.3 Cleaning the mist filter.....	27
5.4 Replacing the mist filter.....	28
5.5 Tank emptying and cleaning .....	29
5.6 Troubleshooting.....	30
5.7 Scrapping.....	31

**IMPORTANT** - The DEPURECO term and logo in this document refer to and are the property of **DEPURECO INDUSTRIAL VACUUMS S.r.l.**

This document remains the exclusive property of DEPURECO S.r.l. Full or partial reproduction by any means (graphical, electronic, etc.) is prohibited without prior authorisation from the Company Management.



## 1. INFORMATION SECTION

### 1.1 Foreword

Dear Customer

Thank you for choosing DEPURECO and a DEPURECO RAM OIL T500 series vacuum cleaner

This manual has been prepared in order for you to fully appreciate the quality of this machine.

Please read all sections before using the machine for the first time.

It includes information, recommendations and important warnings concerning the use of the vacuum, which will help fully exploit the technical properties of your machine.

Read messages, warnings and indications preceded by the following symbols carefully:



**for personal safety;**



**for vacuum integrity;**



**for protecting the environment.**

This vacuum was designed to suction oils, liquids, coolants, emulsions, and chips and to reissue the filtered liquids inside the machine tool. It is equipped with an electrically-driven level switch that stops the suction when the liquid level reaches the set maximum limit and an internal pump for expulsion of the vacuumed liquids.

The vacuum is mounted on robust wheels, two of which are fitted with a brake to hold the machine still while it is in operation.

This manual describes the following models:

### **RAM OIL T500**

The vacuum cleaner is equipped with the following filters:

- ☐ **mist filter**
- ☐ **washable filter**

This manual provides you with all pieces of information necessary for the use and maintenance of your vacuum cleaner.

This specific model has undergone strict testing to ensure maximum reliability. Its operation and durability will depend on proper use and maintenance.



This manual forms an integral part of the vacuum cleaner and must accompany the machine for its entire life cycle.

In the event it is lost or damaged, you can request another copy from DEPURECO INDUSTRIAL VACUUMS S.r.l. (hereafter simply called DEPURECO).

The technical information contained in this manual is exclusive property of DEPURECO and must be considered confidential.

Reproduction, even partial, of graphics, text and illustrations is prohibited by law.

Some details shown in the figures in this manual may differ from those on your vacuum; this is because some components can be removed to ensure maximum illustration clarity.

This manual has been divided into sections for easy consultation and each section has been identified by a specific graphical symbol.

The matters dealt with in this manual are those expressly required in terms of the "Machinery Directive 2006/42/EC" and the technical data shown come from technical file closed at DEPURECO.

With reference to Regulation 1907/2006/EC (REACH), DEPURECO hereby declares that no Substances of Very High Concern (SVHC) included in the Candidate List, are contained in its products.

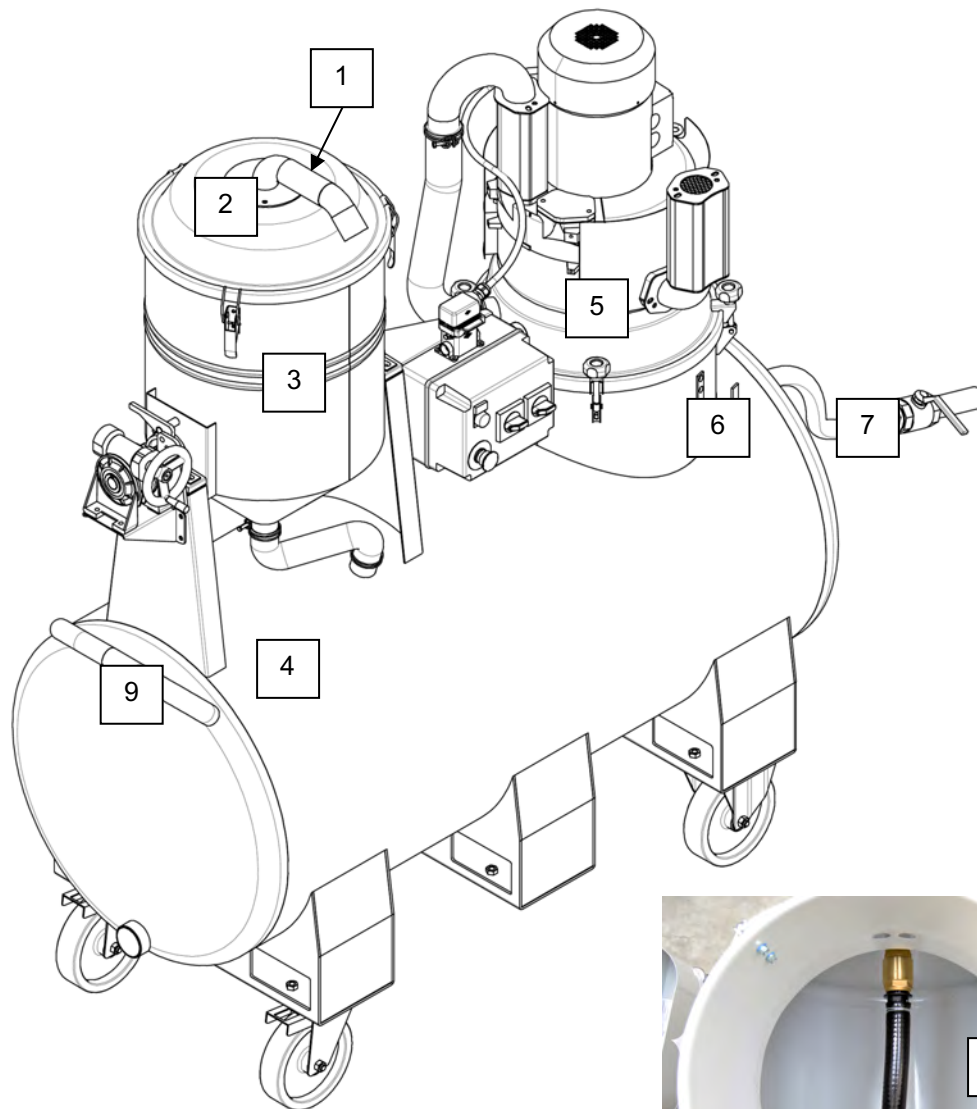
This manual should be kept in a place accessible to all personnel in charge of operating and performing maintenance on the vacuum cleaner.

In the event of any dispute arising, the Court of Turin (Italy) shall have jurisdiction.

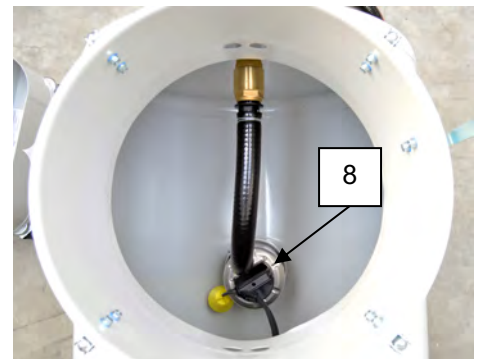


**The manual must accompany the vacuum cleaner in the event of it being resold!**

## 1.2 Main parts



1. Suction nozzle
2. solid residue container lid
3. solid residue container
4. liquid tank
5. vacuum head
6. hose wrapping hook
7. drain pipe, including valve
8. pump for expulsion of liquids (internal view from the hatch)
9. vacuum cleaner handle





### 1.3 Optional parts

A wide range of optional accessories is available from DEPURECO depending on the intended use of the vacuum.

### 1.4 Manufacturer's identification data

#### **DEPURECO INDUSTRIAL VACUUMS S.r.l.**

Corso Europa 609 - 10088 Volpiano (TO) - ITALY

tel. +39 011 98 59 117

fax +39 011 98 59 326

e-mail: [depureco@depureco.com](mailto:depureco@depureco.com)

website: [www.depureco.com](http://www.depureco.com)

VAT No. 02258610357

### 1.5 Identification plate

The data on the vacuum identification plate must be referred to in any correspondence with the manufacturer or the dealer.

<b>DEPURECO S.r.l.</b>				Corso Europa 609 - 10088 Volpiano (TO) - ITALIA tel. +39 011 98 59 117 - fax +39 011 98 59 326 MADE IN ITALY	
Mod.			Volt		
Serial N°	kW	Amp	Hz		
Dust class	IP	Kg	Year		

### 1.6 Intended Uses

This model of vacuum cleaner has been designed, built and protected exclusively for the professional industrial use of suctioning non-flammable and non-harmful dry and/or wet dust and shavings.

Any other use is considered **IMPROPER**.

### 1.7 Authorised environmental conditions

To ensure correct operation, the vacuum cleaner must be kept away from atmospheric agents (rain, hail, snow, fog, dust in suspension, etc.) in an area with a room temperature range between 5° and 45°C and a relative humidity no higher than 70%.

The work environment must be clean, suitably lit and must not give rise to potentially explosive atmosphere.

### 1.8 Noise level

The phonometric tests performed on this specific vacuum cleaner model demonstrate a sound pressure level of

**RAM OIL T500**  
**RAM OIL T555**

**72 dB(A)**  
**76 dB(A)**



**Warning!**

Workers exposed to sound pressure levels higher than 85 dB(A) must be protected by a suitable individual protection device as e.g. acoustic individual protection device type-approved.



In this case, you need to supply workers training and information about risks coming from noise exposure.

## 1.9 Technical data

Characteristic	Unit of Measure	RAM OIL T500	RAM OIL T555
Weight*	Kg	320	350
Overall dimensions ** L x D	cm	60x151	60x151
Overall dimensions** H	cm	178	178
Supply voltage	V - Hz	400 – 50/60	400 – 50/60
Power	kW - HP	4.3 / 5.8	5,5 – 7,5
Maximum depression	mbar	420	480
Air flow rate	m³/h	320	320
Noise level	dB (A)	72	76
Suction nozzle diameter	mm	50	50
Tank capacity	L	500	500
Hopper capacity	L	70	70

(\*) weight without packaging - packaging weight = 18 Kg

(\*\*) machine dimensions without packaging



## 1.10 Warranty

DEPURECO guarantees this model of vacuum cleaner for a period of 12 months from the date of purchase, indicated on the receipt at the time of delivery of the product.

The guarantee is null and void in the event that the vacuum is repaired by unauthorised third parties or by using equipment, accessories or components not supplied or not authorised by DEPURECO, or if the serial number is removed (during the guarantee period).

For the duration of the guarantee, DEPURECO undertakes to repair or replace free of charge parts and components which prove to have manufacturing defects.

Repairs will be exclusively executed at a DEPURECO site or in a DEPURECO approved Assistance Centre and the machine must be sent free of charge (freight cost at user's charge unless otherwise agreed).

The guarantee does not cover cleaning of working parts.

The purchase invoice must be shown to the authorised technical personnel carrying out the repair and must accompany the vacuum during its shipment.

Defects that are not evidently due to materials or manufacturing will be examined solely at our premises or at a Technical Service Centre of our choosing.

Should the complaint be unjustified, all repair and/or replacement expenses shall be charged to the purchaser.

In any case, the following items are not covered by the guarantee: accidental damage due to transport, negligence, abnormal use, improper use, non-compliance with the instructions contained in this booklet or arising from phenomena that do not depend on normal use/operation of the vacuum.

DEPURECO shall not be held liable for any injuries to persons or damage to objects caused by misuse or improper use of the vacuum.

In the event of any dispute arising, the Court of Turin (Italy) shall have jurisdiction.



**To claim under the terms of this guarantee, a photocopy of the form on last page of this manual should be made, filled in completely (preferably in block capitals), and sent by fax to DEPURECO at the number +39 011 9859 326**



*In caso di dubbi non interpretate!  
Telefonate immediatamente al Vostro rivenditore.*





## 2. SAFETY SECTION

### 2.1 Safety information



According to the National Law on Work Safety (in Italy Legislative Decree 81/08), the Safety Manager must train and inform workers about risks involved with using the vacuum cleaner so that they may be able to avoid injury to themselves and others.

Failure to comply with norms, laws or basic safety precautions, may cause accidents during operation, maintenance and repair of the vacuum cleaner. Accidents can frequently be avoided by recognising potentially hazardous situations before they occur. Adequate training is crucial to this end.

DEPURECO shall not be held liable for accidents or damage due to the improper use of the vacuum by untrained personnel or to failure to comply, even partially, with the occupational safety standards and intervention procedures contained in this manual.

Safety warnings and precautions are indicated in this manual as well as on the product itself. Operators must pay special attention to these hazard warnings to prevent accidents with serious consequences for themselves and other people.

Safety messages are indicated by the following symbols:



**Warning!**

**Failure to comply with these messages may cause injuries to the operator.**



**Warning!**

**Failure to comply with these messages can cause damage to the vacuum.**



**Warning!**

**Failure to comply with these messages can harm the environment.**

DEPURECO designs and manufactures its equipment and accessories with care, identifying and compensating all possible risks related to their use. In the event of equipment, procedures, work methods or techniques not expressly provided for by DEPURECO being used, it is crucial to ensure beforehand that there are no dangers for oneself and the others. Nevertheless, DEPURECO shall not be held liable.



**Utilizzate esclusivamente ricambi originali DEPURECO**

La Depureco declina ogni responsabilità  
per l'uso di ricambi non originali.



## 2.2 Safety recommendations



### **Warning!**

The following information plays an important role in preventing all hazards that may occur while the vacuum cleaner is running. However, they cannot replace the expertise and common sense of operators as an overall framework for the prevention of accidents.

Each section lists further safety measures specific to the various functions.

# CAUTION!

- This vacuum may only be used by suitably trained adults.
- This vacuum cleaner is intended for industrial use, e.g., in factories, warehouses, workshops.
- Ensure that mains electrical connects have suitable earthing.
- This vacuum is not intended to be used in corrosive or explosive environments.
- Keep the vacuum cleaner clear of foreign objects such as debris, oil, tools and other objects which may impede its functioning and cause personal injury.
- Avoid the use of toxic or inflammable solvents, such as petrol, benzene, ether and alcohol for cleaning.
- Avoid prolonged contact with solvents and inhaling their vapours.
- Avoid using near open flames or heat sources; ensure adequate ventilation.
- Never use the vacuum cleaner without its mist filter.
- Do not suction up lit cigarette ends as they could ignite the safety filter.
- Do not vacuum petroleum products or inflammable liquids in general.
- Ensure that all protection equipment and guards are in place and that all safety devices are present and operating.
- Do not use the vacuum cleaner on non-level or inclined surfaces.
- Do not wear loose or flowing apparel such as ties, scarves, or torn clothing that could become hung or caught up by the vacuum cleaner.
- Never move the vacuum cleaner by pulling it by the electrical supply cord.
- Never use extension leads, plug-in connection devices and adapters.
- Do not remove the hopper lid when the vacuum is running.
- Do not climb on the vacuum cleaner.



- 
- Do not touch electrical wires, switches, buttons, etc. with wet hands.
  - Regularly check the integrity of the power cable.
  - When using the industrial vacuum cleaner, some components (motor connector, motor body in particular) may reach high temperatures.
  - During operations to return to original work conditions, the personnel in charge must ensure at the end of the procedure that normal operating and safety conditions of the vacuum and, in particular, of the safety devices and protective guards involved in the operation are once again guaranteed.
  - Should the Customer install a tool not supplied by DEPURECO on the vacuum, the safety requirements of Machinery Directive 2006/42/EC must be met. Nevertheless, DEPURECO shall not be held liable for problems caused by the use of such parts.
  - Structural damage, alterations or improper repairs can modify the protective capacity of the vacuum, thereby nullifying this certification and releasing DEPURECO from any liability.
  - This manual must be kept near the machine, so it may be consulted to check the correct cycle use at any time doubts may arise.
  - In the event it is lost or damaged, request another copy from DEPURECO.



**Warning!**

**This vacuum cleaner may contain liquids that may be hazardous to your health.  
Chamber emptying procedures and maintenance must only be performed by specialist personnel using adequate protective equipment.  
Never switch the machine on without an complete filtering system in place.**



## 2.3 Safety plates and symbols

Plates with safety symbols and/or messages are applied to the vacuum and its packaging. These pages show their precise location and the nature of the hazard.



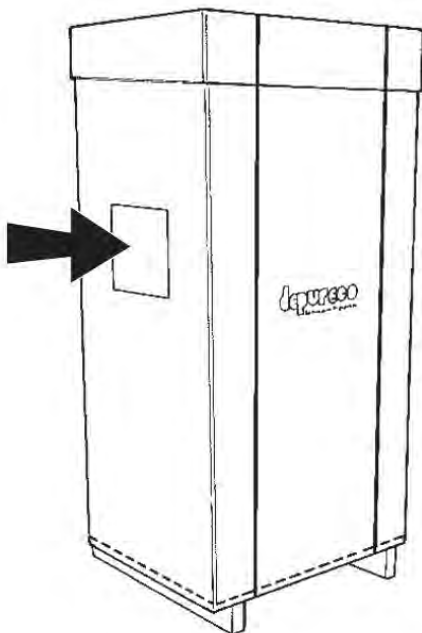
### **Warning!**

**Ensure that all safety messages are perfectly legible.**  
**Clean them using a cloth with water and soap. Do not use solvents, naphtha or petrol.**  
**Request replacements for damaged plates from DEPURECO.**  
**In the event that a plate is located on a piece that is replaced, ensure that a new plate is affixed to the new piece.**



### **Warning!**

**Carefully read this use and maintenance manual before using the vacuum or carrying out maintenance operations.**



### **Warning!**

**Carefully read the instructions on the packaging before handling and unpacking the vacuum.**





## 2.4 Residual risks

DEPURECO recommends complying with the instructions, procedures and recommendations in this manual and with the safety standards in force. DEPURECO also recommends using suitable personal protective equipment as well as the protection devices integrated in the vacuum.

The residual risks analysed on the vacuum and/or its components could be:

### **Electrical risks during maintenance due to the requirement to work on live parts**

The National Law on Work Safety (in Italy Legislative Decree 81/08, articles 80-87) states that it is forbidden to work with live voltage, unless in the case of exceptions as provided in the law.

### **Risks associated with incorrect use in presence of explosive and inflammable liquid substances**

The vacuum must not be used in environments containing liquid substances or liquids that can evaporate at room temperature, inflammable powders and gas.

### **Risks related to operation in humid environments**

Respect the limitations indicated in this manual, in section 1.5 "Authorised environmental conditions".

### **Risk of incorrect interpretation of the safety pictograms**

With reference to risk analysis and identification, DEPURECO has installed hazard labels on the vacuum, in compliance with the standards concerning graphical symbols.

The user must immediately replace any safety plate rendered illegible due to wear or damage.



#### **Warning!**

**The removal of safety plates from the vacuum and/or its components and packaging is strictly prohibited.**

**DEPURECO shall not be held liable for the vacuum's safety in the event of failure to comply with this prohibition.**

## 2.5 Applied Directives

The following directives apply to the vacuum cleaner described in this manual:

- 2006/42/EC      Machinery Directive
- 2014/30/EU      Electromagnetic compatibility directive
- 2011/65/EU - ROHS -      Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Reference standards, including their binding requirements, are managed through the DEPURECO Quality Management System.



### 3. HANDLING, UNPACKING, AND INSTALLATION SECTION

#### 3.1 Handling



**Warning!**

The instructions for transporting and unpacking the vacuum correctly are shown on the packaging as well.

The following instructions also indicate the operations to be undertaken should the vacuum need to be re-packed or unpacked after subsequent transportation.



The vacuum cleaner must be lifted and handled exclusively using a forklift having suitable load bearing capacity.

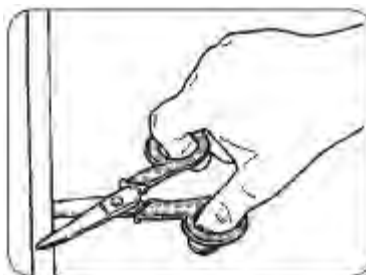
When using a forklift, lift the load 200 mm off the ground and swing backwards.

Always keep the height of the working environment in mind when lifting loads.

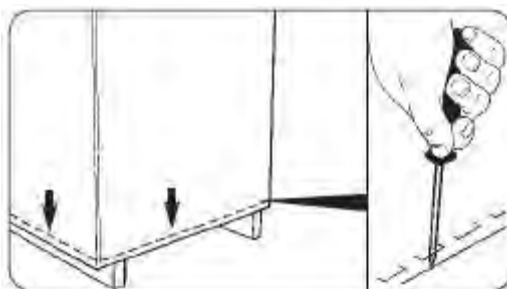
Before starting any movement, ensure that the area is cleared and that there are no moving objects on the packaging. For lifting and handling, apply operating safety laws and normal instructions for fork-lift truck driving.

#### 3.2 Unpacking

- Cut and unwind the two packaging fixing belts



- Remove the staples that fix the card packaging to the pallet with the aid of a screwdriver (where applicable)

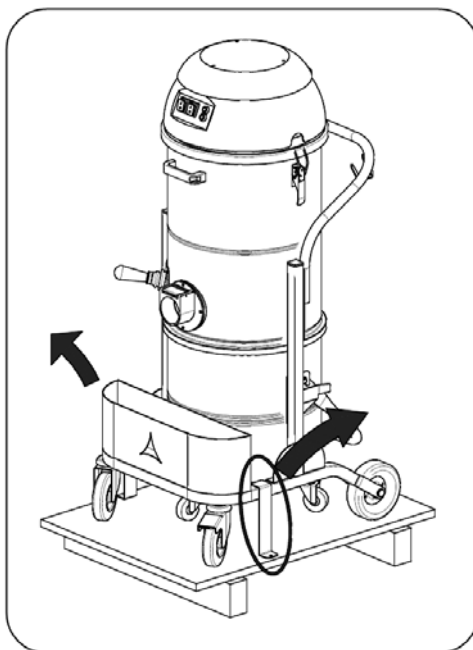




- Remove the cardboard completely (where applicable)



- loosen and remove the fastening screws and brackets from both sides



The cardboard packaging is recyclable and should be collected separately to prevent damaging the environment.



**Warning!**  
Keep the pallet and the fastening brackets.  
In the event of subsequent transport, the vacuum must be secured to the pallet using the same fastening system.



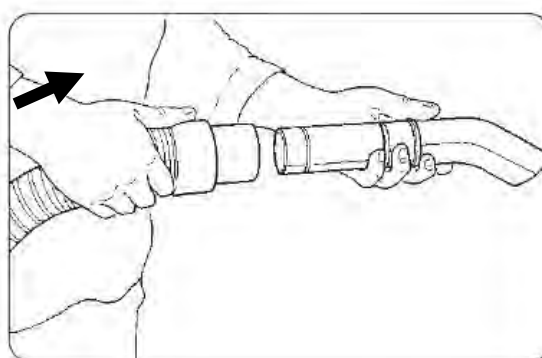
### 3.3 Installation



**Caution!**  
Before installing the vacuum, it is important to carry out a thorough preventive visual inspection to identify any damage which may have occurred during transport.

In the event of one or more components being damaged, do not continue with installation and inform DEPURECO about the anomaly and agree upon action to be taken.

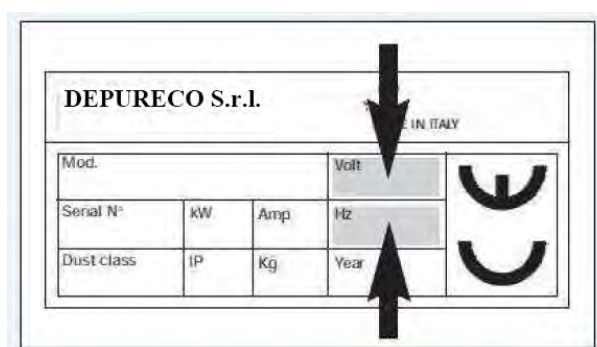
- insert the accessory desired for the type of suction from the opposite side of the pipe



Note: the flexible pipe and the relevant end-pieces and suction accessories are not included with the STANDARD model. Contact your dealer (or DEPURECO) for information regarding the various types of OPTIONALS that can be used on this specific model.

**The following operation must be carried out by a qualified electrician.**

Ensure that the power supply line corresponds to the voltage and frequency indicated on the identification plate and that it is efficiently earthed.



290

The vacuum cleaner's electrical current supply socket must be protected by a CE-marked circuit breaker. Insert the plug (standard supply) into the socket.



**Warning!**  
Do not insert the plug in the power supply socket with wet hands.  
Do not use extension leads.





## 4. OPERATION SECTION

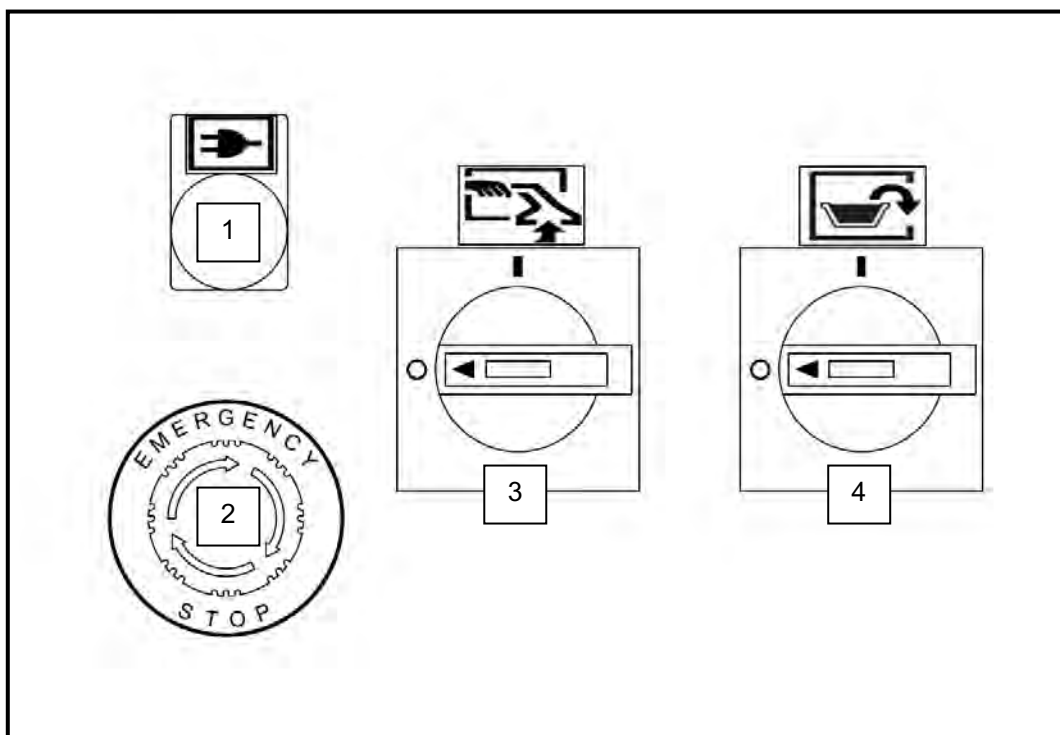
### 4.1 Description of controls



#### Warning!

The vacuum can be used solely by authorised personnel after having read these use and maintenance instructions.

The user of the equipment and the maintenance technician, who carry out operations on the vacuum, must be adequately educated, informed and trained, in compliance with the occupational safety standards in force and, during the various operations, must wear personal protective equipment (PPE), such as safety footwear, gloves, protective goggles, mask, etc. The user must comply with the provisions in force concerning extracted materials and their disposal.



1. White indicator light: VOLTAGE PRESENCE
2. Red mushroom button: EMERGENCY SHUTDOWN
3. I/O switch: LIQUID VACUUM ON/OFF
4. I/O switch: LIQUID EXPULSION ON/OFF



## 4.2 Operation cycle

Ensure that the power cord is intact and in perfect condition.



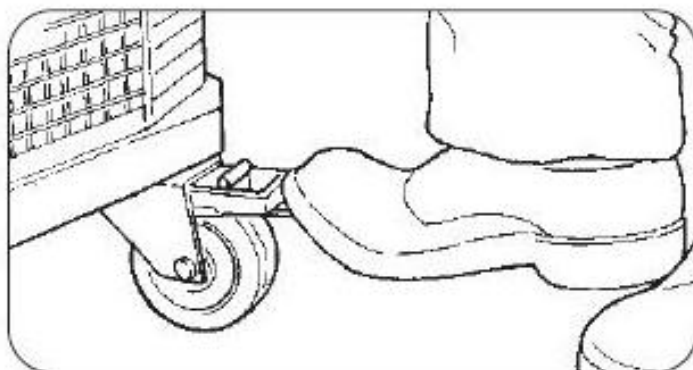
**Warning!**

**Before inserting the plug, ensure that the voltage of the power supply line corresponds to that indicated on the vacuum's identification plate.**

Make sure the power cord is properly inserted in the outlet and make sure the white indicator light (1) VOLTAGE PRESENCE is on. If it is not on, this means the electrical panel is not receiving power.

Make sure that the flexible tube is correctly inserted and locked in the relevant suction nozzle (detail no. 1, para. 1.1)

Block the vacuum using the lever on the swivel casters, as shown in the figure.



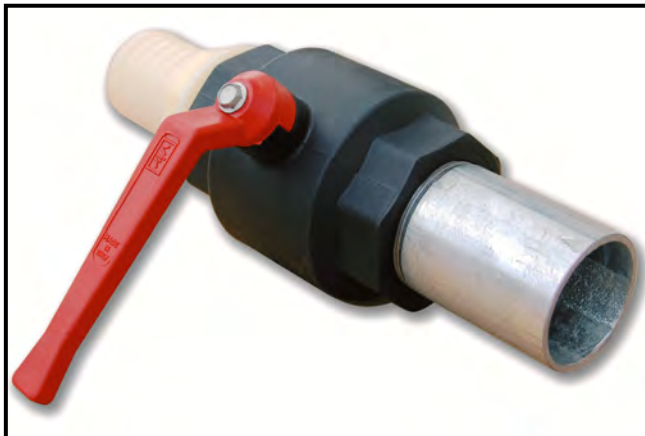
**Warning!**

**Do not move the vacuum cleaner while it is in operation.**



To proceed with vacuuming liquids, follow the steps below:

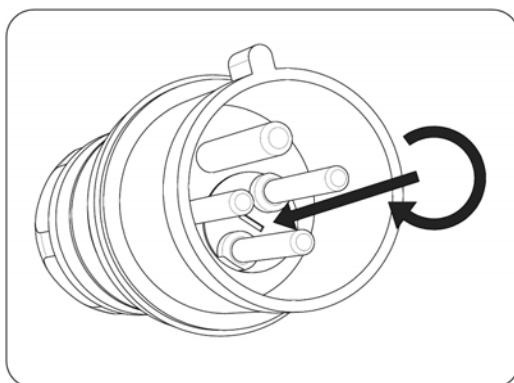
- make sure the drain valve at the end of the drain tube (detail no. 7, par. 1.1) is in the closed position (see image below)



- Place the chosen vacuum accessory on the end of the flexible hose.
- Turn the switch (3) LIQUID VACUUM ON/OFF to "I",
- to stop the vacuum, turn the switch (1) to "O".

If after having rotated the switch (3) to "I" the vacuum cleaner expels the air instead of aspirate it, the power supply phases of the plug are wrong.

To restore the power supply phases, rotate the switch to "O", disconnect the plug from the power outlet, insert a screwdriver into the notch on the inside of the power plug and reverse the two poles by rotating 180°.



**Caution!**

**Before switching the vacuum on again, check that the pump has stopped completely.**

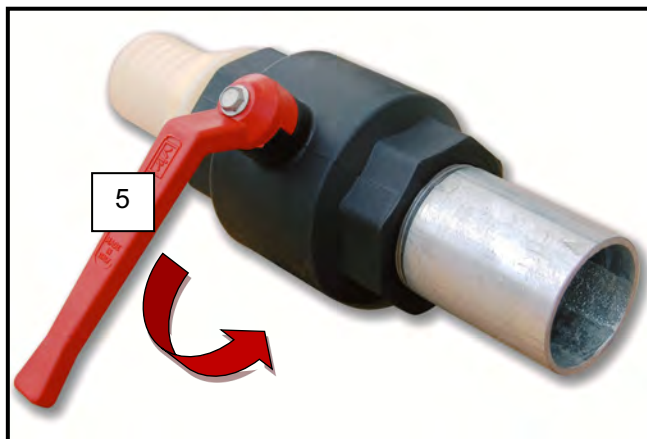
During vacuuming, upon reaching the maximum level of liquid, the machine will automatically stop and it will be necessary to perform the expulsion of the liquid from the tank.

For liquid expulsion, the vacuum has a dedicated pump (detail no. 8, par. 1.1) located inside the tank.



To proceed with the expulsion of liquids, follow the steps below:

- turn the switch (3) to “O”
- as shown in the figure below, turn the handle (5) to open the drain valve



- to start the expulsion of liquids, turn the switch (4) LIQUID EXPULSION ON/OFF to “I”
- to stop the expulsion, turn the switch (4) to “O”.

During the liquid expulsion phase, upon reaching the minimum liquid level inside the tank, the machine will stop automatically.

To proceed with suctioning the liquid, turn the switch (4) to “O” and proceed as indicated above.

It is possible to use the vacuum continuously, consequently, it will be possible to expel liquid from the tank during the vacuum phase.

If you need to stop the vacuum/expulsion of liquids, press the red mushroom button (2) EMERGENCY STOP

For convenience, wrap the drain hose around the hook (detail no. 6, par. 1.1) and to move the vacuum, use the handle (detail no. 9, par. 1.1) located on the side of the tank



**Warning!**

**Do not use the vacuum in liquid expulsion mode with the drain valve closed. In this mode, the non-expulsion of liquids could damage the pump inside the tank**



**Caution!**

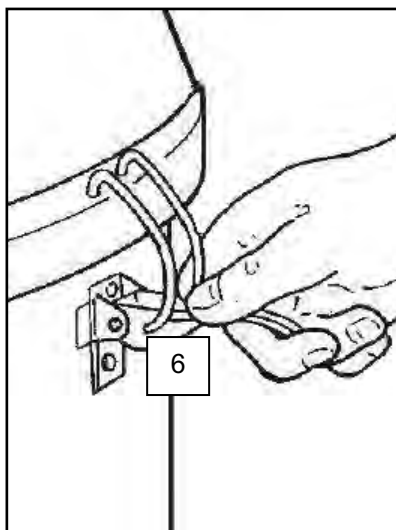
**Never use the vacuum cleaner with the filters clogged.**



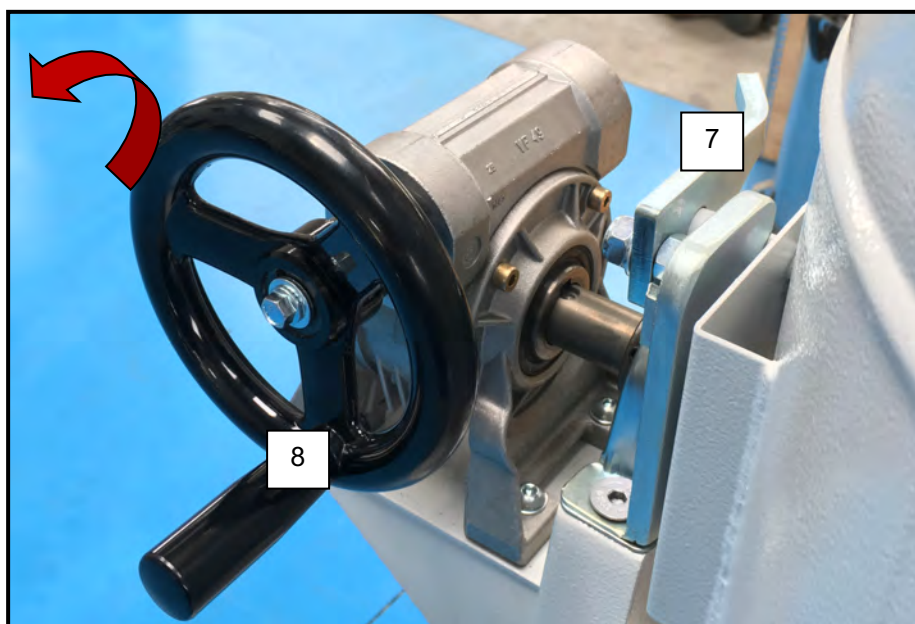
### 4.3 Emptying the solid residue container

To empty the solid residue container, make sure the machine is not in operation and proceed as indicated below:

- release the two hooks (6), gently raise the container lid (detail no. 2, par. 1.1)

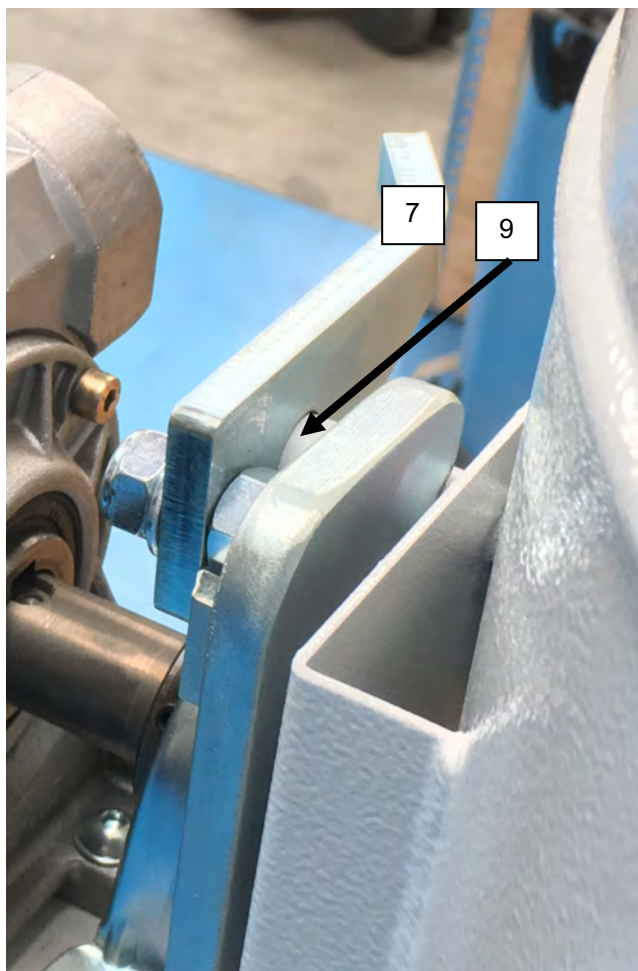


- Remove the solid residue from the vacuumed liquid. For more convenient emptying, the container can be rotated 90°. To rotate, lift the safety hook (7) and turn the handwheel (8) anticlockwise, as indicated in the figure below





- When emptying is complete, return the container to the initial position by turning the handwheel (8) clockwise. Upon reaching the initial position, make sure the pin on the container (9) is locked under the safety hook (7)



#### 4.4 Storage - decommissioning

Remove the mist filter, clean, and empty the tank of any liquid residue inside it and store the vacuum cleaner in a place out of the weather, with temperatures between 0° and 40°C, covering it with a nylon sheet in order to avoid the accumulation of dust.



## 5. MAINTENANCE SECTION



### **Warning!**

**Special vacuum maintenance must be carried out solely by specialised technicians authorised by the DEPURECO dealer.**

### 5.1 Informative notes

This section describes the checks and routine maintenance operations required to ensure proper vacuum operation.

Maximum reliability and minimum maintenance costs are the result of a planned maintenance and inspection schedule carefully followed throughout the entire lifespan of the vacuum.

Observe the set maintenance intervals and schedule the interventions according to specific requirements in relation with the vacuum production cycle.

Always use tools that are in perfect condition and that are specifically intended for the operation to be carried out; the use of inadequate or inefficient tools may cause serious damage.

Any other intervention required to remove faults or malfunctions must be expressly authorised by the manufacturer.

In these cases always communicate vacuum cleaner identification data – see § 1.4 of this manual.

For significant repairs, refer to the authorised dealer, whose specialised personnel has the technological expertise in the original factory build and is always available for prompt interventions.

For user maintenance operations, the vacuum must be disassembled, cleaned and maintained, where possible, in such a way as to prevent hazards to the maintenance personnel and to third parties. Suitable precautionary measures include decontamination before dismantling, measures for filtered forced ventilation of the room where the appliance is disassembled, cleaning of the maintenance area and suitable personal protection equipment.

At least once every three months (or more frequently, according to the operating cycle and the conditions of use), the manufacturer or a qualified technician must check the filters, ensuring that they are not damaged; and ensuring proper operation of the control devices.

Should maintenance operations or repairs be carried out, all contaminated objects must be adequately cleaned, placed in waterproof bags and disposed of in compliance with the regulations in force.





## 5.2 General safety regulations



### **Warning!**

All the operations described above must be carried out with the plug disconnected from the socket.

**Before starting any maintenance or cleaning operation, wear suitable PPE (protective clothing, goggles and/or gloves, etc.) according to the work to be done.**



**Place a sign on the vacuum with the message:**

**“MACHINE UNDER MAINTENANCE  
DO NOT START”**



**Before returning to use, the whole system must be checked according to the starting procedures.**

**Run a few trial operating cycles after every maintenance operation to ensure proper machine operation.**

**Failure to observe these precautions can cause serious injury to personnel.**

Maintenance operations must be carried out by trained technicians specialised in the following sectors:

- Mechanical maintenance
- Electrical maintenance

It is the Chief Safety Officer's duty to ensure the professionalism and skills of these technicians.

**Before starting any maintenance operation, the Chief Safety Officer must:**

- Keep unauthorised personnel out of the work area.



- ☞ Ensure that the necessary tools are in good conditions and readily available to the maintenance technician.
- ☞ Ensure that the maintenance technician is equipped with the personal protective equipment required for the specific operation (gloves, goggles, shoes, mask, etc.).
- ☞ Ensure that the maintenance technician has carefully read the instructions contained in this manual and knows the operation of the vacuum and its components perfectly well.

- Ensure that there is enough light and, if necessary, provide 24 Volt torches.





**Before starting any maintenance operation, the Maintenance technician must:**

dissect all power supplies and put the vacuum cleaner in a safe lock



**Warning!**

**If it is absolutely necessary to work with the power supply connected, when set forth by current safety laws (in Italy, Legislative Decree 81/08), the maintenance technician must keep a safe distance, have a stop button handy and never put hands in the drain area.**

At the end of the procedure and before returning to use, the maintenance technician must check that guards are functioning correctly and the protection devices are intact.

Operations on the motors or on other electrical components must only be carried out by the specially trained electrical maintenance technician authorised by the Chief Safety Officer.



**Warning!**

**After any maintenance work, the Chief Safety Officer is required to check the safety conditions of the vacuum cleaner and of its safety devices.**

**Before every work shift**

- Check that the power cord and the plug are not damaged: replace them immediately if there are any signs of wear, using a cord of the same type (information c/o DEPURECO). This operation is the sole responsibility of an electrician.
- Check the integrity of the safety symbols (pictograms) applied to the vacuum cleaner.
- Check the integrity of the flexible suction pipe and of the accessories to be used.



**Warning!**

**The flexible suction pipe, if perforated, reduces the suction power and disperses liquids.**



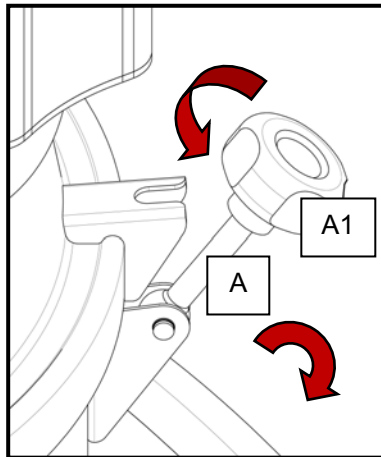
### 5.3 Cleaning the mist filter



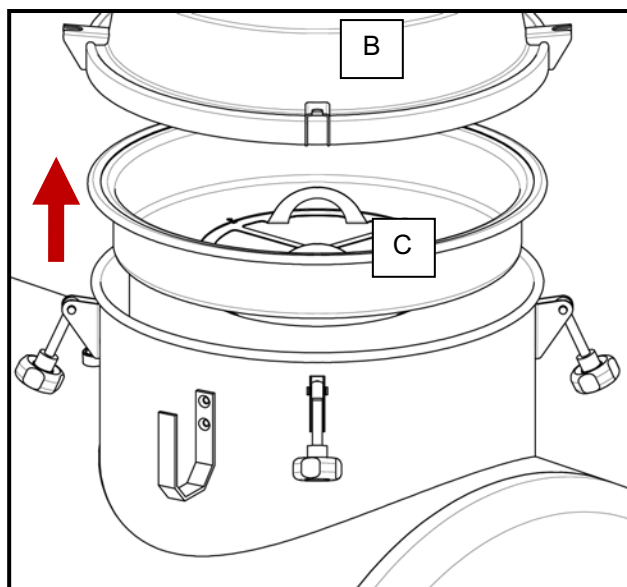
**Warning!**  
Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).

To replace the mist filter, proceed as follows:

- switch off the machine
- disconnect the vacuum cleaner from the power supply
- disconnect the pump plug from the outlet on the electrical panel
- Release the closure hooks (A) on the vacuum head to release it from the hatch (to loosen the hooks, turn the handwheel clockwise (A1))

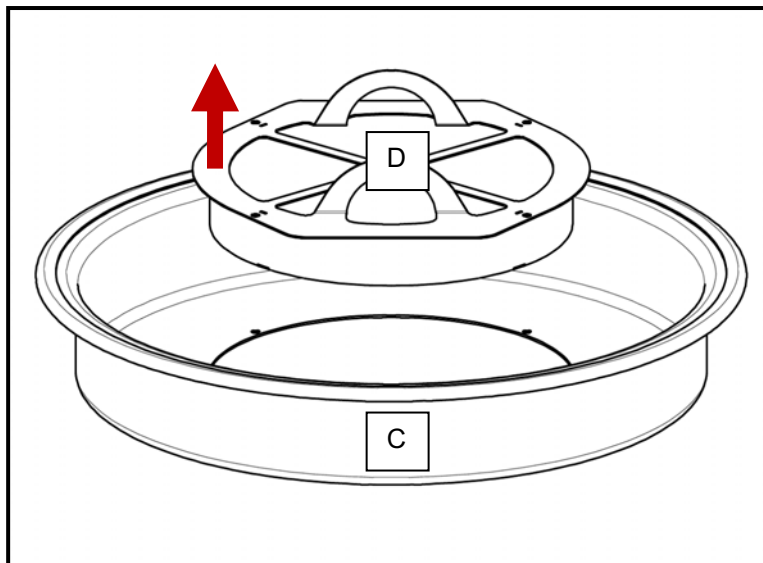


- From the hatch, lift the vacuum head (B) and position it in a safe place to avoid damaging the pump. Given the heaviness of the head, we recommend screwing an eyebolt in the housing on the pump body for lifting and then using mechanical means to do the lifting. From the connector, lift the mist filter support ring (C)





- Unscrew the mist filter (D) from the ring (C). Clean the filter with a jet of water with sufficient pressure to remove any residues inside the filter.



**To reassemble the filter**, operate in reverse order:

- screw the mist filter (C) on the support ring and reposition the latter inside the hatch
- position the head of the vacuum above the hatch, making sure that it is positioned as previously and that the notches on the closure hooks are aligned with the proper closure hooks
- tighten the closure hooks
- connect the pump plug to the outlet on the electrical panel
- connect the vacuum cleaner to the power supply
- turn on the vacuum cleaner, immediately assessing its efficient operation.

## 5.4 Replacing the mist filter

**For mist filter replacement**, operate as indicated in chap. 5.3 replacing the redundant mist filter with a new one



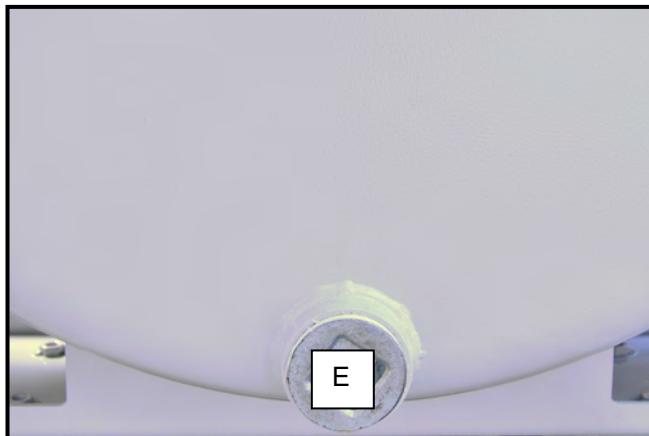
remove the filter, insert it inside a plastic bag, close it and **dispose of it according to the laws in force** regarding the type of material being suctioned.



## 5.5 Tank emptying and cleaning

To completely empty the tank of liquid residue, proceed as follows:

- switch off the machine
- disconnect the vacuum cleaner from the power supply
- unscrew cap (E) on the side of the tank, allow the liquid residue to flow from the bottom of the chamber



- Whenever you wish to clean the inside of the tank, remove the vacuum head (for details, see par. 5.3), then use a jet of water to clean the internal walls and the bottom of the tank.



**Warning!**

**To prevent any damage to the liquid drain pump located in the tank, avoid directing the waterjet on it**

To return to normal vacuum use reverse the steps:

- position and block the vacuum head in the hatch (see par. 5.3)
- screw on the cap located on the side of the tank, connect the pump plug to the proper outlet on the electrical panel
- connect the vacuum cleaner to the power supply
- turn on the vacuum cleaner, immediately assessing its efficient operation



**Warning!**

**Make sure the tap is screwed on and tightened properly, if not there could be leaks during normal use**

**ONLY USE ORIGINAL DEPURECO FILTERS**



## 5.6 Troubleshooting

FAULT DETECTED	POSSIBLE CAUSE	SOLUTION RECOMMENDED
The vacuum cleaner will not start	<ul style="list-style-type: none"><li>- No power supply</li><li>- Magneto-thermic switch tripped</li></ul>	<ul style="list-style-type: none"><li>- Check for the presence of voltage in the socket</li><li>- Check the condition of the plug and the power cable</li><li>- Reset the magneto-thermal switch</li><li>- Contact the DEPURECO technical assistance</li></ul>
Irregular suction	<ul style="list-style-type: none"><li>- Mist filter</li></ul>	<ul style="list-style-type: none"><li>- Follow filter cleaning procedure. If this solution is not effective, replace it.</li></ul>
	<ul style="list-style-type: none"><li>- Clogged suction tube</li></ul>	<ul style="list-style-type: none"><li>- Check suction pipe and clean it.</li></ul>
Irregular or no liquid expulsion	<ul style="list-style-type: none"><li>- Faulty liquid expulsion pump</li></ul>	<ul style="list-style-type: none"><li>- Contact DEPURECO technical assistance</li></ul>
Excessive noise from motor	<ul style="list-style-type: none"><li>- Faulty pump</li></ul>	<ul style="list-style-type: none"><li>- Contact DEPURECO technical assistance</li></ul>



## 5.7 Scrapping



At the end of the life cycle, to avoid damages to environment, each component of the vacuum cleaner must be disposed of responsibly, in adequate dumps, according to current laws - in Italy, Legislative Decree 152/2006, as amended.

Before scrapping the machine, the plastic and rubber materials must be separated from the electrical material.



### **Correct disposal of the product (electrical and electronic equipment waste)**

The electrical and electronic parts of this product must be disposed of in compliance with Italian Legislative Decree 151/2005, as amended. (Directive 2002/96/EC on WEEE - Waste Electrical and Electronic Equipment)



The parts of the vacuum made of plastic material, aluminium and steel can be recycled in appropriate centres.



*In caso di dubbi non interpretate!  
Telefonate immediatamente al Vostro rivenditore.*

## WARRANTY

To make a warranty claim, photocopy this form and fill it in all parts, preferably in block capitals, and send via fax to the manufacturer at the following number **0 1 1 . 9 8 5 9 3 2 6** or via email to **[DEPURECO@DEPURECO.com](mailto:DEPURECO@DEPURECO.com)**

VACUUM / COMPONENTS Model

Serial number

Date of delivery:

Company name:.....

Address: ..... Nr:.....

Postal Code: ..... City/Town:.....

Activity sector:.....

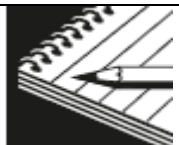
Tel.:.....

Manager:.....

Notes:.....

.....

*Dealer's stamp*



## MAINTENANCE LOG

### INTERVENTION 1

Date

Technical Assistance

Type of intervention

*Signature*

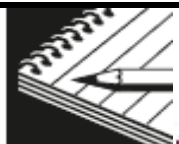
### INTERVENTION 2

Date

Technical Assistance

Type of intervention

*Signature*



## MAINTENANCE LOG

**Depureco Industrial Vacuums Srl**  
Società soggetta a direzione e coordinamento COFISE spa

PERFORMANCE ON VACUUM SINCE 1972

Corso Europa, 609 - 10088 Volpiano (TO)  
Tel. +39 011 98.59.117  
Fax +39 011 98.59.326

[www.depureco.com](http://www.depureco.com)  
[depureco@depureco.com](mailto:depureco@depureco.com)  
[depureco@documentipec.com](mailto:depureco@documentipec.com)

C.F. e P.I. 02258610357  
Registro Imprese di Torino - R.E.A. TO-1149668  
Capitale Sociale: € 25.000 i.v.



**INTERVENTION 3**

Date

Technical Assistance

Type of intervention

*Signature*