

# INSTRUCTION AND MAINTENANCE MANUAL



## AC SERIES ATEX Z22 II3D

AC 65 Z22 AC 100 Z22

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 depureco@depureco.com depureco@documentipec.com



## TABLE OF CONTENTS:

## 1. INFORMATIVE SECTION

1.1	Foreword	3
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	.16
2.5	Applied Directives	.16

## 3. HANDLING, UNPACKING AND INSTALLATION SECTION

3.1	Handling	17
	Unpacking	
3.3	Installation	20

## 4. OPERATION SECTION

4.1	Description of the controls	21
4.2	Operating cycle	22
4.3	Emptying the bin	25
4.4	Inserting and locking the bin	27
4.5	Storage – Decommissioning	28

## 5. MAINTENANCE SECTION

5.1	Informative notes	29
5.2	General safety regulations	
5.3	Replacing the filter	
5.4	Replacing the HEPA filter (if provided)	
5.5	Troubleshooting	35
5.6	Scrapping	

Depureco Industrial Vacuums Srl Società soggetta a direzione e coordinamento COFISE spa PERFORMANCE ON VACUUM SINCE 1972

## 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.I.** 

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 AC Z22 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

ຶ່ງ

This manual describes the following models:

## AC 65 Z22 AC 100 Z22

The vacuum cleaner is equipped with the following filters:

- ANTISTATIC M FILTER (P11847)
- PTFE ANTISTATIC M FILTER (P12282)
- □ HEPA FILTER CARTRIDGE (if provided) (P09868)

The vacuums are classified according to the following dust classes:

Low risk – suitable to separate dust with an exposure limit value of > 1 mg/m3 on the basis of the occupied volume



L

Medium risk - suitable to separate dust with an exposure limit value of > 0,1 mg/m3 on the basis of the occupied volume



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.

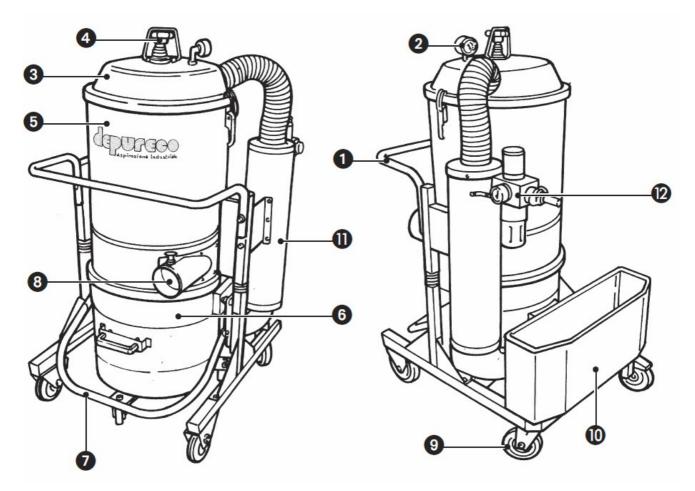
This manual should be kept in a place accessible to all personnel in charge with operating and performing maintenance on the vacuum cleaner.

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. Vacuum handle
- 2. Manometer
- 3. Vacuum's cap
- 4. Filter shaker handwheel
- 5. Filter chamber
- 6. Dust/ Debris Bin
- 7. Bin handle
- 8. Suction inlet
- 9. Wheels
- 10. Accessories Bin
- 11. Venturi Tube
- 12. Pneumatic supply 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.I.

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** - website: **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.

DEPUR		rso Europa 609 011/98.59.117 MADE IN	Fax 011/98.59.326
Model	5	Serial No.	¥
Dust class	kg	Year	EX) ATEX

## 1.6 Permitted Uses

These vacuum cleaners are designed and built according to the 2014/34/EU (ATEX) 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 solid materials, only in covered areas. This vacuum cleaner is designed to collect combustible dust and/or dry particles in Zone 222 classified atmospheres with the following limitations:

Minimum Ignition Energy (MIE) of the dust >3mJ

Kst-Value of the dust <300 bas m/s (St1, St2)

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

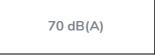
To ensure the correct operation, the vacuum cleaner must be kept away from atmospheric agents (rain, hail, snow, fog, dust in suspension, etc.) in an area with a room temperature range between  $5^{\circ}$  and  $45^{\circ}$ C and a relative humidity no higher than 70%.

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

AC Z22





#### 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.	AC Z22
Weight*	[Kg]	64
Overall dimensions**	[mm]	660 × 800 × 1200
Maximum vacuum	[mBar]	500
Maximum air flow	[m³/h]	480
M filter surface	[m²]	2,4
H filter surface (if provided)	[m²]	2,8
Noise level	[dB-A]	70
Bin capacity	[L]	65/100

(\*) 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 <u>www.depureco.com</u> 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 use flexible hoses which are not wholly antistatic (superficial antistatic properties are not accepted). The use of original DEPURECO accessories is recommended. Verify electric continuity with an ohmmeter:
  - 1. Between the inlet and the ending part of the vacuum's accessories: The resistance measured must be inferior to  $100M\Omega$  ( $108 \Omega$ )
  - 2. Between the bin and the plug (ground pin) with an electric device, or between the bin and the earthing cable (supplied) with compressed air powered devices. The resistance measured must be less than 10  $\Omega$
- 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 dust that may be hazardous to your health. The emptying out and maintenance procedures, including removing the dust containers, must be carried out exclusively by specialized personnel wearing suitable safety clothing. 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.





### Warning!

Crushing hazard for the upper limbs during insertion and locking of the dirt container under the vacuum cleaner.

Never place your hands between the vacuum and the dirt container while inserting and locking the latter under the vacuum cleaner.

Lock the container by means of the special lever, using **BOTH HANDS** 



#### Warning!

Read carefully this use and maintenance manual before using the vacuum cleaner or carrying out maintenance operations on it





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

Page 15 of 40



## 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.



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

Warning!

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
- 2014/34/UE ATEX 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



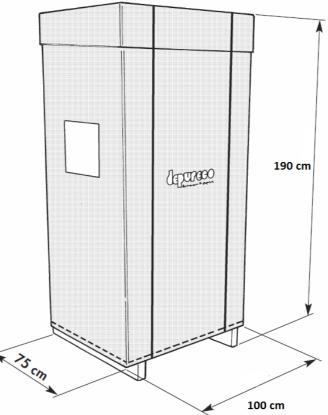
## 3.1 Handling



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:





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.

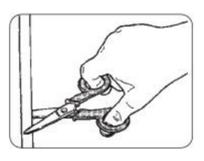
Always keep the height of the working environment in mind when lifting loads.

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.

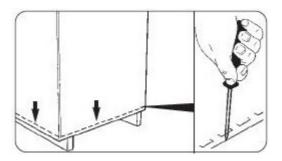


## 3.2 Unpacking

- 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

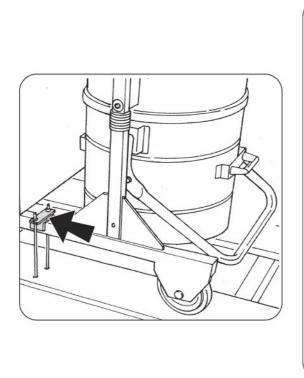


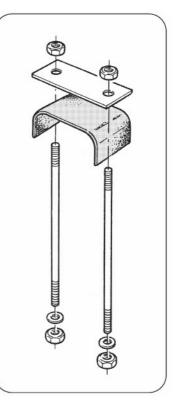
- remove the carton completely





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







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.

## 3.3 Installation



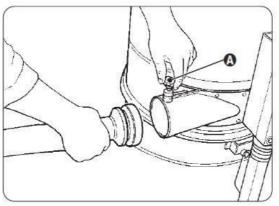


Caution! Before installing the vacuum, it is important to carry out a thorough preventive visual inspection to identify any damage which may have occurred during transport.

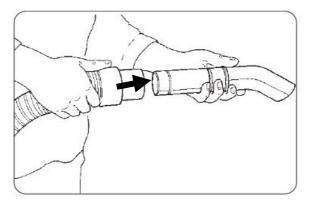
In the event of one or more components being damaged, do not continue with installation, inform DEPURECO about the anomaly and agree upon action to be taken.

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

- Lift the knob and insert the hose equipped with a sleeve in the special suction inlet (Detail Nr.8, Chapter 1.2)



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



Note: the flexible tube 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.

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

## 4. OPERATION SECTION



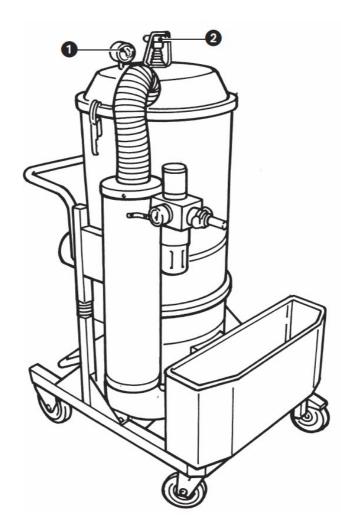
#### 4.1 **Description of the controls**



#### 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.



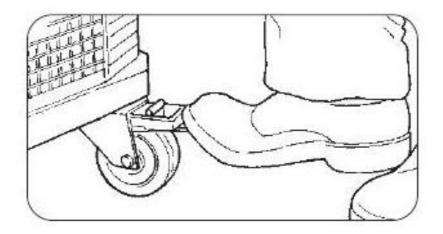
- 1. Pressure Gauge: indicates filter clogging
- 2. Handwheel: for the manual shaking of the filter



## 4.2 Operating cycle

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

- Make sure the hose is properly inserted and locked in the suction inlet.
- Make sure the bin is located and blocked under the chamber of the vacuum cleaner
- Secure the vacuum cleaner using the lever on the swivel caster, as shown in the figure.



- Hold the end of the hose with the chosen vacuum accessory.
- Verify that the compressed air supply cable is inserted correctly
- Open the pneumatic supply valve (Detail Nr. 12, Chapter 1.2) and make sure that the pressure gauge (2) indicates an inlet pressure of 6 8 bar.
- Start the vacuuming

To switch the vacuum off close the pneumatic supply valve (Detail Nr.12, Chapter 1.2)



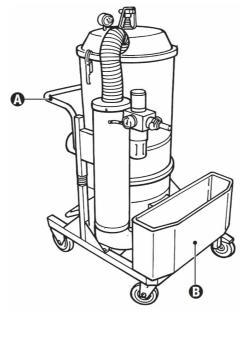
### Warning!

Never, under any circumstance, disconnect the pneumatic supply cable from the vacuum cleaner before closing the valve.



Use the handles on the back of the machine to move the vacuum cleaner (A).

For a greater comfort, you can place the accessories which are most frequently used in the conveniently dedicated bin (B)





The vacuum cleaner's cap features a vacuum gauge (1) which indicates the degree of vacuum inside the vacuum cleaner. If with the vacuum in operation and the suction inlet free, the pressure gauge shows the values written in the table below, the filter is clogged. Stop the vacuum and clean the filter.

Туре	Clogged filter value
AC 65 Z22	150 mBar
AC 100	TOUTIDAI

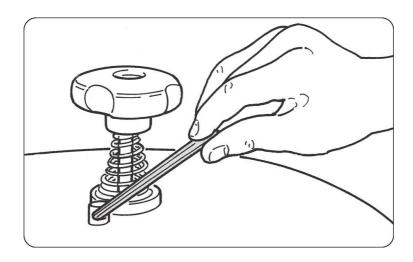


Caution! Do not use the vacuum cleaner with the filter clogged

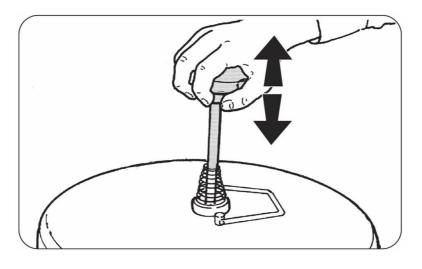


To clean the filter, proceed as follows:

- Switch the vacuum off by interrupting the incoming compressed air supply
- Lower the lever which blocks the handwheel on the vacuum's cap



- Lift and lower vigorously the lever to shake the inner filter



#### Warning!



If the pressure gauge still shows irregular vacuum values, the flexible hose or the accessory could be clogged. In that case it will be necessary to clean it, removing what caused the clogging.

## 4.3 Emptying the bin



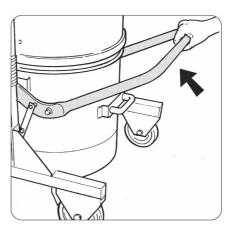
Warning! Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).

Depending on the type and quantity of material being vacuumed, it is necessary to periodically check

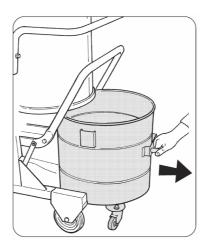
the bin to avoid filling it excessively.

Proceed as follows to empty the container:

- Switch the machine off
- block the vacuum cleaner by means of the lever located on the swivelling wheel
- unlock the container by lifting the special handle.



- remove the bin using the handle



Page 25 of 40



- empty the bin in a dedicated container for waste disposal



In the case the chosen collecting container is a plastic bag proceed as follows for its replacement:

- After having removed the bag, tie it, dispose of it and insert a new bag in the bin





#### Warning!

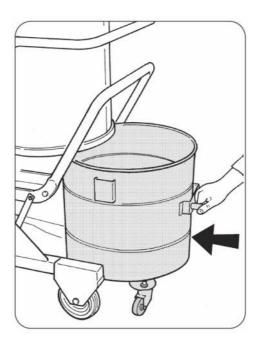
If the bin weighs more than 15 Kg, at least two people are needed to empty it. Waste disposal must take place in accordance with the laws in force in the country of use of the vacuum cleaner - for Italy Legislative Decree 152/2006 and amendments



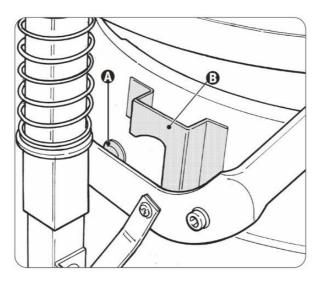
## 4.4 Inserting and locking the bin

Follow the steps below to insert and lock the container:

- place the bin under the vacuum

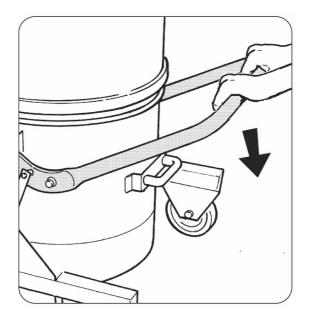


- The pins (A) must be aligned with the slots (B)





- lock the container under the filter chamber by lowering the special handle with both hands





## Warning!

Crushing hazard for the upper limbs during insertion and locking of the dirt container under the vacuum cleaner. Never place your hands between the vacuum and the dirt container while inserting and locking the latter under the vacuum cleaner.

## 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.

## **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 <u>personal protection equipment</u>.

<u>Once every three months</u> (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.

Page 30 of 40

- 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

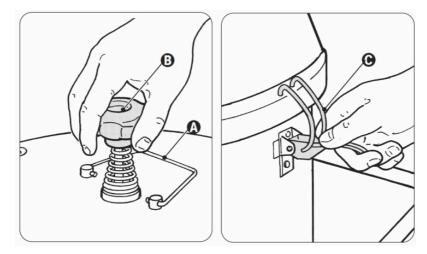




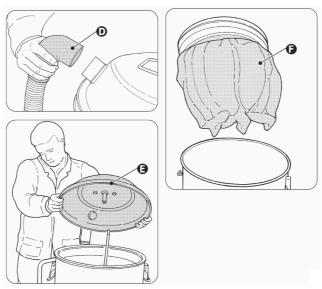
Warning! Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).

Proceed as follows to replace the filter:

- Close the pneumatic supply valve
- Lower the lever (A), unscrew the handwheel (B) completely and remove it
- Unlock the two locking hooks (C) on both sides



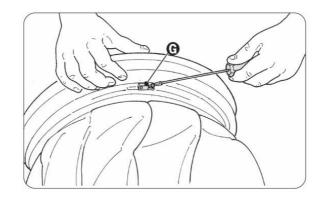
- Disconnect the hose (D)
- Remove the vacuum's cap (E)
- Remove the HEPA Filter (if provided) by unlocking the dedicated locking hooks
- Slip out the filter (F) and place all components on a work bench



Page 32 of 40



- Loosen the fastening clip (G), remove the filter from its support and, using scissors, cut the lower belts that clamp it to the filter's cage





Remove the filter, put it in a plastic bag, seal it and dispose it of according to the current legislation on the type of material extracted

To reassemble the filter, operate in reverse order:

- Insert the new filter in the support ring and lock it by means of the fastening clip (G)
- lock the filter to the cage by tying the special laces on the bottom side



- insert the filter (F) with ring and cage inside the filtering chamber
- place the HEPA filter (if provided) on top of the filter
- position the vacuum cleaner's cap (E), paying particular attention to the alignment of the hole for the hose, then tighten locking hooks (C)
- Insert the handwheel back and tighten it completely
- Lower the handwheel's lever (A)
- Connect the hose (D) again



## 5.4 Replacing the HEPA filter (if provided)

Proceed as follows to replace the filter:

- Close the pneumatic supply valve
- Unlock the HEPA filter from both sides of the vacuum's head
- Remove the vacuum's head
- Unlock the HEPA filter from both sides of the filtering chamber
- Remove the HEPA filter and lay it overturned on a work bench. Then unscrew the filter's fastening screw and remove the cartridge



remove the filter, put it in a plastic bag, seal it and **dispose it of according to the applicable legislation on** the type of material collected.

To reassemble the filter, operate in reverse order:

- Fit the new filter and screw it onto the holding cage by means of the screw previously removed
- Reposition the HEPA filter on the filter chamber and lock it with the appropriate locking hooks
- Position the vacuum cleaner's head, then lock it with the appropriate locking hooks
- Connect the vacuum cleaner to the pneumatic supply line

EXCLUSIVELY USE FILTERS MANUFACTURED BY DEPURECO

## 5.5 Troubleshooting



FAULT DETECTED		
The vacuum cleaner will not start	- No pneumatic supply	<ul> <li>Check for the presence of the pneumatic supply</li> <li>Contact DEPURECO's technical assistance</li> </ul>
Irregular values on the pressure gauge	- Clogged filter	<ul> <li>Clean any clogged filters.</li> <li>If this solution is not effective, replace it.</li> </ul>
pressure gauge	- Clogged hose	- Check vacuum hose and clean it.
Dusts come out of the	- Pierced filter	- Replace the filter
vacuum cleaner	<ul> <li>Filter not suitable for the vacuumed material</li> </ul>	<ul> <li>Install a filter suitable for the vacuumed material</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!





**INTERVENTION 1:** 

DATE:

TECHNICAL ASSISTANCE:

TYPE OF INTERVENTION:

**INTERVENTION 2:** 

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 www.depureco.com | C.F. e P.I. 02258610

depureco@depureco.com

depureco@documentipec.com

PERFORMANCE ON VACUUM SINCE 1972



**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 depureco@depureco.com depureco@documentipec.com

#### 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 depureco@depureco.com depureco@documentipec.com