



# INSTRUCTION AND MAINTENANCE MANUAL



# XM / XM Z22 / MINIBULL / M H PRO ACD / M45 H ACD / M45 H ACD INERT SERIES

TRASLATION OF ORIGINAL INSTRUCTIONS

#### **Depureco Industrial Vacuums Srl**

Company under the direction and coordination of COFISE S.p.A.

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# **DECLARATION OF CONFORMITY FOR NON-ATEX VERSIONS**



#### **DECLARATION OF COMPLIANCE**

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	co.com – www.depureco.com	
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The production control was carried out by Notified Body No. 0474 RINA Services S.p.a. This declaration shall become invalid if modifications on the vacuum cleaner are carried out

without approval from the manufacturer.

First issue: 15 June 2019 Revision 01: 16 October 2023 Revision 02: 26 April 2024

The Legal Representative Marco Devincentis

Depureco Industrial Vacuums Srl PERFORMANCE ON VACUUM SINCE 1972

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# **DECLARATION OF CONFORMITY FOR ATEX VERSIONS**



#### **DECLARATION OF COMPLIANCE**

#### The manufacturer:

**DEPURECO INDUSTRIAL VACUUMS S.r.l.** – Via Venezia, 32 – 10088 Volpiano (TO) – ITALY | **Phone**. +39 011 98 59 117 – **Fax** + 39 011 98 59 326 – **Tax code. | VAT REG. NO**. 02258610357

e-mail: depureco@depureco.com - www.depureco.com

#### hereby declares

under their sole responsibility that the vacuum cleaner model described in this manual

To which this declaration refers, complies with the essential safety requirements provided by the Machinery Directive 2006/42/EC, the Directive 2014/30/EU regarding Electromagnetic Compatibility, the Directive 2011/65/EU - ROHS - regarding restriction of the use of certain hazardous substances in electrical and electronic appliances and by the ATEX Directive 2014/34/EU with the following details.

The conformity has been verified in accordance with the requirements mentioned by the Standards:

UNI EN 1127-1:2019 UNI EN ISO 80079-36:2016 EN 60079-0:2018 EN60079-31:2014

# C€ II 3 G/D Ex htc IIIB T140°C Gc/Dc

The Harmonised Standards applied for the design, manufacture and testing of the vacuum cleaner are listed in a technical file stored at the technical department of DEPURECO S.r.l. premises.

This declaration shall become invalid if modifications on the vacuum cleaner are carried out without approval from the manufacturer.

First issue: 15 June 2019 Revision 01: 16 October 2023.

The Legal Representative Marco Devincentis, CEO

Depureco Industrial Vacuums Srl

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# 1. INFORMATION SECTION



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This document is the sole property of DEPURECO S.r.l. Therefore its reproduction with any means (graphic, digital, etc.), whether partially or wholly, is prohibited without authorisation from Management.

# 1.1. INTRODUCTION

Dear Customer,

Thank you for choosing DEPURECO. We hope you will enjoy using your new XM / XM Z22 / MINIBULL / M H PRO ACD / M45 H ACD / M45 H ACD INERT series vacuum cleaner.

We have prepared this manual so that you can appreciate the quality of this machine.

Please read it through before using the vacuum cleaner for the first time.

It contains information, tips and important warnings on using and maintaining the vacuum cleaner so that you can take full advantage of the technical qualities of your machine.

Please read the messages, warnings and indications, preceded by symbols, very carefully:



For the safety of people



For the integrity of the vacuum cleaner



For the protection of the environment.

This manual describes the following models:

- XM 20
- XM20 TM Z22 € / XM20 TT Z22 €
- XM 20 JC
- XM 20 OVEN
- XM 35 JC
- XM 35 JC LP
- **MINIBULL**
- M H PRO ACD
- M45 H ACD
- M45 H ACD INERT

Machines are classified according to their dust filtration efficiency:

- L (light risk): in vacuum cleaners with a class L filter, the maximum degree of dust penetration is less than 1%;
- M (medium risk): in vacuum cleaners with an M filter, the maximum degree of dust particle penetration is less than 0.1%;
- H (high risk): in vacuum cleaners with an H filter, the maximum degree of penetration of dust particles is less than 0.005%; This vacuum cleaner is designed to carry out suction, cleaning and collection of solid materials (dust and processing residues).

This specific model has undergone strict testing to ensure maximum reliability; its smooth operation and longlasting service life will depend on good maintenance and careful use



This manual is an integral part of the vacuum cleaner and must accompany it throughout its service life, until it is scrapped. If it is lost or damaged, ask DEPURECO INDUSTRIAL VACUUMS S.r.l. (hereinafter simply known as DEPURECO) for a replacement copy.

The technical information in this manual is owned by DEPURECO and must be considered confidential.

Reproduction, even partial, of the graphic design, text and illustrations is prohibited by law.

Some details shown in the illustrations in this manual may differ to those of your vacuum as some components may have been removed to ensure the utmost clarity of said illustrations.

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

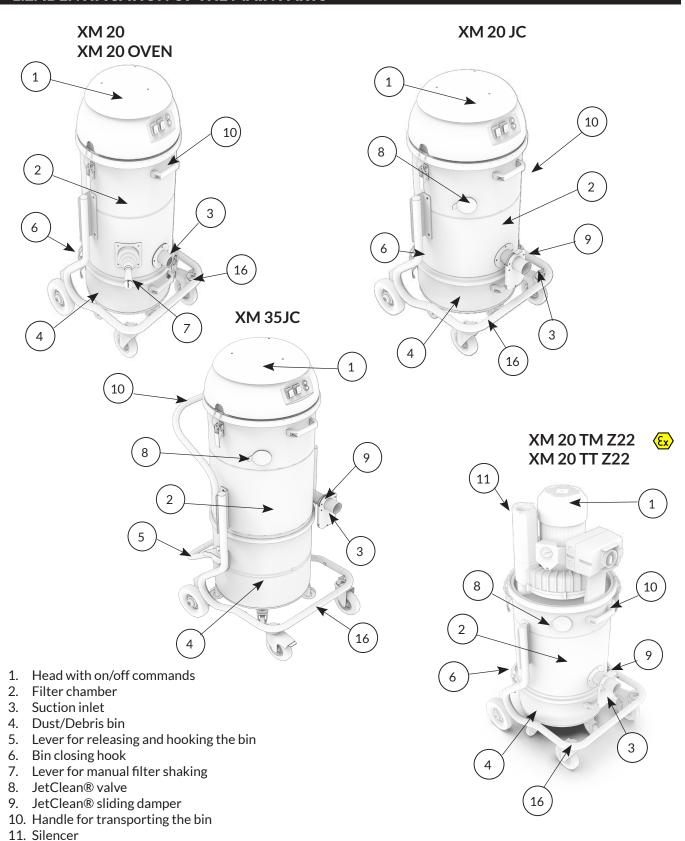
In relation to Regulation 1907/2006/EC (REACH), DEPURECO declares that its products do not contain any of the Substances of Very High Concern (SVHC) included in the Candidate List

This manual can be accessed via the QR code on the vacuum cleaner or via the website www.depureco.com. Alternatively, contact the manufacturer Depureco. This manual must be available to all vacuum cleaner operators and maintenance staff

The Court of Turin (Italy) has jurisdiction for all disputes.

The QR code with the manual must accompany the vacuum cleaner if it is resold!

# 1.2. IDENTIFICATION OF THE MAIN PARTS

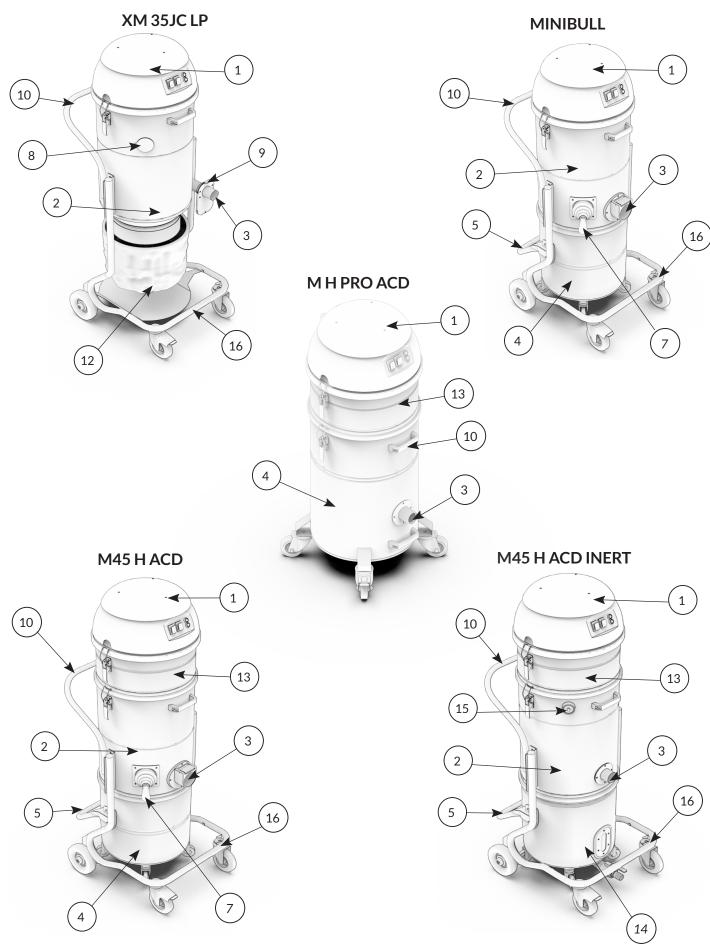


- 14. Inert liquid bin
- 15. Hydrogen safety valve

13. HEPA filter chamber

12. Endless Bag system for collecting

16. Frame



# 1.3. OPTIONAL PARTS

Based on the application of the vacuum cleaner, a wide range of other optional accessories is available from DEPURECO

# 1.4. MANUFACTURER'S IDENTIFICATION DATA

Depureco Industrial Vacuums S.r.l.

Via Venezia, 32 - 10088 Volpiano (TO), Italy

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e-mail: depureco@depureco.com - website: www.depureco.com

# 1.5. IDENTIFICATION PLATE



# 1.6. ATEX MARKING

XM 20 TM Z22 - XM 20 TB Z22

CE ( II 3 G/D Ex htc IIIB T140°C Gc/Dc

# 1.7. INTENDED USES

# XM 20 - XM 20 OVEN - XM 20 JC - XM 35 JC - XM 35 JC LP - MINIBULL

These vacuum cleaners are built in compliance with Machinery Directive 2006/42/CE to be used by a single operator and are designed to:

- to industrial use, such as in manufacturing plants or warehouses;
- to dry/wet cleaning of floors or walls;
- to the suction of wet or damp substances;
- to the extraction of dry, non-combustible dust.

# **ATTENTION**

If there are combustible dusts or flammable gases in the workplace, the Employer must classify the Zone and choose a machine of a suitable category (according to the definition given in Directive 2014/34/EU).

Any other use is considered NON-COMPLIANT.

#### M H PRO ACD - M45 H ACD

These vacuum cleaners are built in compliance with Machinery Directive 2006/42/CE to be used by a single operator and are designed to:

- vacuum in industrial environments;;
- vacuum dry, flammable, deposited and health hazardous dust (dust class H according to EN 60335- 2-69);
- vacuum non-explosive dust;
- vacuum flammable dust of all explosion classes (except dust with minimum ignition energy ME < 1 mJ);</li>
- flammable dust from a zone 22, if the unit is installed outside potentially explosive areas.

#### The device is **NOT** suitable for:

- vacuuming of ignition sources and dusts with a glow temperature ≤ 190 °C;
- vacuuming explosive substances or equivalent, explosive vapor-air mixtures, as well as Al and Mg dusts;
- vacuuming flammable fluids (flammable, easily flammable, highly flammable according to the Dangerous Substances Directive 67/548/EEC, flash point below  $55\,^{\circ}\text{C}$ ), as well as of mixtures of flammable powders with flammable fluids;
- vacuuming mixtures of flammable fluids and flammable dusts;
- vacuuming glowing or hot particles to avoid causing a fire or explosion.
- being connected to a dust-generating machine;

# **ATTENTION**

If there are combustible dusts or flammable gases in the workplace, the Employer must classify the Zone and choose a machine of a suitable category (according to the definition given in Directive 2014/34/EU).

Any other use is considered NON-COMPLIANT.

#### M45 H ACD INERT

These vacuum cleaners are built in compliance with Machinery Directive 2006/42/CE to be used by a single operator and are designed to:

- Vacuum in industrial environments;;
- Vacuum dry, flammable, deposited and health hazardous dust (dust class H according to EN 60335- 2-69);
- Vacuum flammable dust of any dust explosion class;
- Vacuum flammable dust from a zone 22 if the equipment is installed outside potentially explosive areas;
- Vacuum titanium dust Explosive and conductive dust Magnesium dust or aluminum dust Condensation dust and explosive metal dust from additive manufacturing (3D printing).

#### The machine is not suitable for

- vacuuming of ignition sources and dusts with a glow temperature ≤ 190 °C;
- vacuuming explosive substances or equivalent, explosive vapor-air mixtures;
- vacuuming mixtures of flammable fluids and flammable dusts;
- vacuuming glowing or hot particles.
- aspiration of toxic substances
- being connected to a dust-generating machine;

# **ATTENTION**

If there are combustible dusts or flammable gases in the workplace, the Employer must classify the Zone and choose a machine of a suitable category (according to the definition given in Directive 2014/34/EU).

Any other use is considered NON-COMPLIANT.

To ensure proper operation, the vacuum cleaner must be located away from weather (rain, hail, snow, fog, suspended dust, etc.) with an ambient temperature between 5° and 45°C and with humidity not exceeding 70%. The working environment should be clean, sufficiently bright and in the absence of a potentially explosive atmosphere.

The temperature of the surfaces of an ACD vacuum cleaner in contact with combustible dust must not exceed  $135^{\circ}$  C

# XM 20 TM Z22 - XM 20 TB Z22

These vacuum cleaners are built in compliance with Machinery Directive 2006/42/CE to be used by a single operator and are designed to:

- to industrial use, such as in manufacturing plants or warehouses;
- for indoor use:
- vacuum combustible dust and/or dry particles in Zone 22 classified atmospheres with the following limitations:
  - Minimum ignition energy (MIE) of dust > 3mJ.

# **ATTENTION**

If there are combustible dusts or flammable gases in the workplace, the Employer must classify the Zone and choose a machine of a suitable category (according to the definition given in Directive 2014/34/EU).

Any other use is considered NON-COMPLIANT.

# 1.8. PERMITTED ENVIRONMENTAL CONDITIONS

To ensure that the vacuum cleaner works properly, it must be placed where it is protected from adverse weather (rain, hail, snow, fog, suspended dusts, etc.), where the ambient temperature is between 5° and 45°C and the humidity is no higher than 70%.

The work environment must be clean and appropriately lit.

# 1.9. NOISE LEVEL

The phonometric tests carried out on this specific model of vacuum cleaner show a sound pressure level of

Machine	Noise level		
XM 20 - XM 20 JC - XM 20 OVEN	72 dB(A)		
XM 35 JC - XM 35 JC LP - MINIBULL	72 dB(A)		
XM 20 TM Z22 - XM 20 TT Z22	72 dB(A)		
M H PRO ACD	72 dB(A)		
M45 H ACD - M45 H ACD INERT	72 dB(A)		

# ATTENTION

For sound pressure levels higher than 85 dB(A), workers must be protected by appropriate personal protective equipment (PPE), such as approved ear defenders.



# **ATTENTION**

For these conditions, workers must be trained and informed on the risks resulting from exposure to noise.

1.10.	TECHNICA	L DATA					
	Unit of measurement	XM 20	XM 20 JC	XM 20 OVEN	XM 35 JC	XM20 TM Z22	XM20 TT Z22
Weight	[kg]	38	38	38	45	57	57
Dimensions	[mm]	516 x 545	516 x 545	516 x 545	516 x 545	516 x 545	516 x 545
Height	[mm]	994	994	994	1285	1050	1050
Power supply voltage/ Frequency	[V] - [Hz]	230 - 50/60	230 - 50/60	230 - 50/60	230 - 50/60	230 - 50/60	230 - 50/60
Power	[Watt] - [HP]	2600 - 3,5	2600 - 3,5	2600 - 3,5	2600 - 3,5	1800 - 2,4	2200 - 3
Suction inlet diameter	[Ø mm]	50	50	50	50	50	50
Motor type		2x By-Pass	2x By-Pass	2x By-Pass	2x By-Pass	ATEX blower	ATEX blower
Maximum vacuum/ Continuous vacuum	[m Bar]	250/-	250/-	250/-	250/-	-/180	-/180
Maximum air flow	[m <sup>3</sup> /h]	380	380	380	380	240	240
Main filter		Star	Conical cartridge	Star	Conical cartridge	Conical cartridge	Conical cartridge
Main filter surface area	[cm <sup>2]</sup>	15000	35000	15000	35000	35000	35000
Media		Polyester	PTFE Coated Polyester	Nomex	PTFE Coated Polyester	Polyester antistatic	Polyester antistatic
Absolute filter		HEPA H14*	HEPA H14*	HEPA H14*	HEPA H14*	HEPA H14*	HEPA H14*
Absolute filter surface area	[cm <sup>2]</sup>	22000	22000	22000	22000	22000	22000
Noise level	[dB(A)]	72	72	72	72	72	72
Max. capacity	[L]	20	20	20	45	20	20



	Unit of measurement	XM 35 JC LP	MINIBULL	M H PRO ACD	M45 H ACD	M45 H ACD INERT
Weight	[kg]	40	45	45	45	57
Dimensions	[mm]	516x 545	516 x 545	516 x 545	516 x 545	516 x 545
Height	[mm]	1285	1285	1250	1600	1600
Power supply voltage/ Frequency	[V] - [Hz]	230 - 50/60	230 - 50/60	230 - 50/60	230 - 50/60	230 - 50/60
Power	[Watt] - [HP]	2600 - 3,5	2600 - 3,5	2600 - 3,5	2600 - 3,5	1800 - 2,4
Suction inlet diameter	[Ø mm]	50	50	50	50	50
Motor type		2x By-Pass	2x By-Pass	2x By-Pass	2x By-Pass	ATEX blower
Maximum vacuum/ Continuous vacuum	[m Bar]	250/-	250/-	250/-	250/-	-/180
Maximum air flow	[m <sup>3</sup> /h]	380	380	380	380	240
Main filter		Conical cartridge	Star	Star	Star	Conical cartridge
Main filter surface area	[cm <sup>2</sup> ]	35000	15000	6000	15000	35000
Media		PTFE Coated Polyester	Polyester	Polyester antistatic	Polyester antistatic	Polyester antistatic
Absolute filter		HEPA H14 *	HEPA H14*	HEPA H14*	HEPA H14	HEPA H14
Absolute filter surface area	[cm <sup>2</sup> ]	22000	22000	22000	22000	22000
Noise level	[dB(A)]	72	72	72	72	72
Max. capacity	[L]	Sistema Endless Bag	45	45	45	inertisation bin

<sup>\* =</sup> filter optional

The vacuum cleaner is fitted with the following filters, which differ between the supplied and optional filters:

	STAR M	STAR ANTISTATIC	STAR TEFLON	STAR ANTISTATIC TEFLON	STAR NOMEX	CLASS M CONICAL CARTRIDGE	ANTISTATIC CONICAL CARTRIDGE	HEPA H13 CONICAL CARTRIDGE	HEPA H14 CARTRIDGE
XM 20	•	0	0	0	0	-	-	-	0
XM 20 JC	-	-	-	-	-	•	0	0	0
XM 20 OVEN	-	-	-	-	•	-	-	-	0
XM 35 JC	-	-	-	-	-	•	0	0	0
XM 20 TM Z22	-	-	-	-	-	-	•	-	0
XM 20 TT Z22	-	-	-	-	-	-	•	-	0
XM 35 JC LP	-	-	-	-	-	•	0	0	0
MINIBULL	•	0	0	0	0	-	-	-	0
M H PRO ACD	-	•	-	-	-	-	-	-	•
M45 H ACD	-	•	-	0	-	-	-	-	•
M45 H ACD INERT	-	-	-	-	-	-	•	-	•

<sup>• =</sup> filter supplied with the vacuum cleaner

<sup>○ =</sup>filter optional



# 1.11. WARRANTY

**DEPURECO**12 guarantees this vacuum cleaner model for 12 months from the date of purchase, which is indicated on the tax document provided when the product is delivered. The warranty becomes null and void if the vacuum cleaner has been repaired by unauthorised third parties or if equipment, accessories or components not supplied or not authorised by **DEPURECO** are used or if the serial number is removed (during the warranty period). **DEPURECO** will repair or replace free of charge those parts or components that are proved, within the warranty period, to have manufacturing defects.

The repair is carried out solely at our premises or at an Assistance centre indicated by us and must be received carriage paid (transport costs to be borne by the user, unless otherwise agreed).

The warranty does not cover cleaning of working parts.

The purchase tax document must be presented to authorised technical staff who will do the repair or it must be sent with the vacuum cleaner. Defects not clearly attributed to material or manufacturing will be examined solely at our premises or at a Technical Assistance Centre indicated by us. If the complaint proves to be unjustified, all costs for repair and/or replacement of parts will be charged to the buyer.

The following are **excluded from the warranty**: accidental damage due to transportation, neglect or inadequate handling, improper use, failure to comply with the warnings in this manual or resulting from phenomena not dependent on normal use/operation of the vacuum cleaner.

DEPURECO is not liable for any damages to people or property caused by poor or imperfect use of the vacuum cleaner.

The Court of Turin (Italy) has jurisdiction for all disputes.



# 2. SAFETY SECTION

# 2.1. INFORMATION REGARDING SAFETY

Pursuant to Italian Legislative Decree 81/08 as amended, the Safety Manager must inform and train workers on the risks associated with using the vacuum cleaner, so that they are able to protect their own safety and that of others.

Failure to observe the basic safety rules or precautions can cause accidents during use, maintenance or repair of the vacuum cleaner. An accident can often be avoided by recognising potentially dangerous situations before they actually occur. Adequate training is a fundamental requirement.

DEPURECO will not be held liable for any accidents or damages resulting from the vacuum cleaner being used by untrained staff or being used improperly, or from failure to observe, even partially, the accident prevention regulations and intervention procedures in this manual.

Safety precautions and warnings are indicated in this manual and on the product itself. If these danger messages are ignored, the operator can have an accident with serious consequences for himself and for other people.

DEPURECO carefully designs and manufactures the appliances and their accessories, identifying and compensating for all possible risks associated with use. If tools, procedures, work methods or working techniques not explicitly envisaged by DEPURECO are used, you must ensure beforehand that there are no dangers for yourself or for others, even so, DEPURECO will not be held liable.



# ATTENTION!

Only use original Depureco spare parts. Depureco is not liable for the use of non-original spare parts.

# 2.2. SAFETY REQUIREMENTS



# ATTENTION!

The instructions below are important in order to completely protect against all dangers that may be encountered when operating the vacuum cleaner.

However, they cannot be separated from the competence and common sense of the operator, as an overall framework for careful prevention of accidents.

Structural damage, modifications, alterations or improper repair can change the protection capability of the vacuum cleaner thus cancelling this certification and excluding any liability by DEPURECO

Each section contains a list of additional safety requirements specific for the different operations.

Prior to use, operators should receive the necessary training in the use of the machine and information on the substances for which it is to be used, including safe methods for removal and disposal of the collected material.



# **ATTENTION!**

#### Commissioning - connection to the mains:

- Make sure there is no evident sign of damage to the vacuum cleaner before starting work.
- Before connecting to the power socket, make sure that the air hoses are correctly positioned (for vacuum cleaners equipped with an air counterflow cleaning system). Carry out the operation in a safe area, where there are no explosive atmospheres.
- Before connecting the vacuum cleaner to the mains, make sure that the voltage indicated on the plate matches that of the 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 connections on the mains power cable must be protected from water splashes.
- Check that the mains is connected properly.
- Make sure that the earthing clamp is properly connected to a point for which continuity with the earthing system is guaranteed.
- Only use vacuum cleaners with the mains power cable in perfect condition to avoid danger of electric shock.
- Regularly check the mains power cable to ensure that there are no damages or signs of wear, cracking or aging.

# **ATTENTION!**

# During operation, do not:

- Step on, crush, pull or damage the mains power cable.
- Unplug the cable from the mains by just pulling the cable (pull the plug).
- Only replace the electric power cable with one of the same type as the original.
- The power cable must be replaced by the manufacturer's Assistance Service or by qualified staff.

# **ATTENTION!**

#### It is strictly forbidden:

- For underage or inadequately trained people to use this vacuum cleaner.
- To connect the electricity to a network without efficient earthing.
- To use outdoors in adverse weather conditions.
- To use and store the vacuum cleaner outdoors in humid conditions.
- To use the vacuum cleaner if the castor wheel is not locked when vacuuming.
- To use the vacuum cleaner on surfaces that are not level and horizontal.
- To use it in corrosive environments.
- To roll or bend the hose during suction.
- For ATEX versions and models, to use hoses with earth wire that is not anti-static (an anti-static surface alone is not permitted).
- Always use original DEPURECO accessories. Use an ohmmeter to check electrical continuity:
  - between the suction inlet and the terminal of suction accessories: the resistance measured must be less than  $100M\Omega$  (for ATEX versions and models)
  - between the container and the plug (earth pin) on an electrical machine, or between the container and the earth wire (supplied) on compressed air models. The resistance measured must be: less than  $10 \Omega$  (for models and versions with compressed air supply)
- To use the machine in work environments that are not classified according to the instructions given on the machine's identification plate.
- To vacuum the following materials:
  - Burning materials (embers, hot ash, lit cigarettes, etc.)
  - Open flames
  - Combustible gases
  - Flammable, combustible or aggressive liquids (petrol, solvents, acids, alkaline solutions, etc.).
  - Dusts/substances and/or their explosive and spontaneous ignition mixtures (magnesium or aluminium powders, etc.).
- To have prolonged contact with solvents and inhale their vapours.
- To use near open flames or heat sources; ensure adequate ventilation.



- To use the vacuum cleaner in rooms where adequate ventilation is not ensured, especially if the exhaust air is recirculated within the same room. To comply with the required limit values, the recirculation volume flow must not exceed 50% of the fresh air volume.
- To tamper with or modify the pressure relief valve set by the manufacturer (in models where valve is present).
- Do not use the JetClean cleaning system in the presence of potentially explosive clouds in the atmosphere (for models and versions with this cleaning system).
- To carry out maintenance on the industrial vacuum cleaner in ATEX classified areas (for ATEX models and versions).
- To carry out maintenance on the vacuum cleaner without first turning the machine off and unplugging the power cable.
- To keep foreign materials such as debris, oil, tools and other objects inside the container that could damage operation and harm people.
- To use flammable or toxic solvents like petrol, benzene, ether and alcohol for cleaning.
- To use the vacuum cleaner without the filter unit provided by the manufacturer.
- To use the industrial vacuum cleaner without the safety devices or if they are not in proper working condition
- To use the industrial vacuum cleaner with guards not in place.
- Do not place your hands inside the container positioning guides or between the container and the vacuum cleaner during the insertion and locking of the debris container under the vacuum cleaner: the movement of the lifting handle may cause finger crushing. Wear gloves when removing the suction head, filter unit or collection container.
- To open the container with the vacuum cleaner running.
- To open the container in an area classified as potentially explosive.
- To keep the vacuum cleaner switched on and supplied with power via the mains plug in the event of prolonged breaks after use.
- To add extension leads, plug-in connection devices and adapters.
- To step on the vacuum cleaner.
- To move the vacuum cleaner while it is in operation.
- To wear loose or dangling items such as ties, scarves, torn clothing that can get caught or be vacuumed by the vacuum cleaner.
- To touch electrical wires, switches, buttons, etc. with wet hands.
- To touch some of the components (motor terminal block, especially the motor body) that can reach high temperatures while using the industrial vacuum cleaner.

# ATTENTION!

This vacuum cleaner may contain dust that is harmful to health.

The emptying and maintenance procedures, including the elimination of dust collection containers, must only be carried out by specialised staff wearing the appropriate personal protective equipment

This manual must always be available for consultation on the expected operating cycle and whenever any

If it is lost or damaged, you must ask DEPURECO for a replacement copy.

#### M H PRO ACD - M45 H ACD - M45 H ACD INERT

- Observe the safety regulations applicable to the materials to be processed.
- Do not operate the equipment without the complete filter system.
- Simultaneous collection of several combustible dusts in the collection container may lead to fire or explosion.

# M45 H ACD INERT

- Before turning on the vacuum cleaner model M45 H ACD Inert, it is necessary to check that the inert liquid reaches the minimum level (the liquid must be visible through the porthole on the container).
- Near the inspection window is a sticker indicating the maximum permissible level of inert liquid inside the bin.



Use only silicone-based inerting oil with high dielectric strength (indicatively in the range of 10<sup>14</sup>Ohm cm).





# 2.3. PLATES AND SAFETY SYMBOLS

Plates bearing safety symbols and/or messages are applied to the vacuum cleaner and the packaging. Their exact location and the nature of the danger are provided in these pages.



# **ATTENTION!**

The plates and symbols shown below are indicative and may not apply to the models of the vacuum cleaner series described. The presence of each symbol varies depending on the specifications of the series and/or individual model.



# **ATTENTION!**

Make sure that all safety messages are clearly legible. The user is required to immediately replace any safety plates that become illegible due to wear or damage.

Clean them with a cloth, soap and water. Do not use solvents, naphtha or petrol. Replace damaged plates asking DEPURECO for new ones.

If a plate is on a part being replaced, make sure that a new plate is affixed to the new part.



This sticker indicates that the device can vacuum dust up to class M.



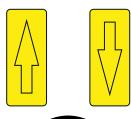
This sticker indicates that the device can vacuum dust up to class H.



This sticker indicates the manual filter cleaning system.



This sticker warns of the danger of crushing limbs.



This sticker indicates the need to align the vacuum cleaner's components for its proper functioning.



This sticker indicates that the vacuum cleaner is earthed.





This sticker indicates the supply voltage of the vacuum cleaner.



This sticker indicates the supply voltage of the vacuum cleaner.



This sticker indicates the maximum liquid level inside the container (for models and versions where applicable).



Ex Hexagon – ATEX Directive 2014/34/EU This sticker indicates that the vacuum cleaner is certified for use in areas where there is a risk of explosion (for dedicated models and versions).



This sticker indicates that the appliance can vacuum combustible dusts in non-Atex classified areas (for dedicated models and versions).

# **ATTENTION!**

Carefully read the instruction and maintenance manual before using the vacuum cleaner or carrying out maintenance.

It is strictly forbidden to take the safety plates off the vacuum cleaner and/or its components and off the packaging.

DEPURECO disclaims any liability for the safety of the vacuum cleaner in the event of failure to comply with this prohibition.



# 2.4. RESIDUAL RISKS

DEPURECO recommends strictly following the instructions, procedures, recommendations in this manual and the current safety standards. Furthermore, DEPURECO recommends using the protective devices provided, both those built into the vacuum cleaner and personal ones.

With this in mind, the residual risks analysed on the vacuum cleaner and/or on its components can be:

#### Electrical risks when carrying out maintenance due to the need to operate with live voltage Pursuant to Italian Legislative Decree 81/08 - articles from 80 to 87 - it is forbidden to operate with live

voltage, except under the exceptions provided for by said decree.

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

The vacuum cleaner must not be used in an environment containing liquid substances or substances in the form of liquids that can vaporise at room temperature, flammable dusts, gases.

#### Risk of operation in a humid environment

Observe the limits given in this manual in section 1.8 "Permitted environmental conditions".

#### Risk of misunderstanding the safety pictograms

With reference to the risk analysis and identification, DEPURECO has affixed danger labels to the vacuum cleaner taken from the legislation relating to graphic symbols.

The user is required to immediately replace any safety plates that become illegible due to wear or damage.

# 2.5. DIRECTIVES APPLIED

The following directives are applied 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/EU Low voltage directive
- 2014/34/EU ATEX Directive (for ATEX models and versions)

The regulatory references, including mandatory requirements, are managed in the Quality Management System and archived at DEPURECO.



# 2.6. ATEX SAFETY INSTRUCTIONS



- Ex Hexagon ATEX Directive 2014/34/EU. In this manual the Ex hexagon is next to the main safety instructions concerning the risk of explosion.
- All staff involved in the installation, use and maintenance of the appliance and its components should
  receive technical training for the tasks to be carried out, particularly for working in areas with a potentially
  explosive atmosphere. Any changes made to this appliance may invalidate its safety features. Always
  follow the manufacturer's instructions.
- ZONE 22: area in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation but, if it does occur, will persist for a short period only. It is forbidden to use the appliance in areas classified as ZONE 0, 1 or 2 due to the presence of gas
- Combustible dusts with the following characteristics can be handled:

Self-ignition temperature in MIT cloud	°C	>215
Self-ignition temperature in LIT layer	°C	>215
Minimum Ignition Energy (MIE) at all operating temperatures	°C	≥3

- It is forbidden to use the appliance with hybrid, explosive and St2 or St3 class dust mixtures and chemically unstable dusts.
- The **DF** series is certified for use in ATEX Zone 22, where the formation of an explosive atmosphere during normal operations is unlikely and, if it does occur, will only be for a short duration. It is forbidden to use the appliance in areas classified as ZONE 0, 1 or 2.
- The user must ensure that the appliances are used according to their intended use, namely that they are employed in ZONES classified as compatible with the zones for which said appliances are declared suitable by the manufacturer.
- The appliance is designed to work in standard environmental conditions:
  - Temperature -15°C ≤ Tamb ≤ +40°C.
  - Atmospheric pressure +0.8/1.1 bar

The temperature of the product handled must not exceed 40°C.

- Any electrical or mechanical components to be installed on the appliance must be certified as being of a suitable category for use:
  - category 3D (ZONE 22)
- For maintenance or cleaning operations, the user must ensure that the equipment used (vacuum cleaners, portable lamps, etc.) is of a suitable category for the environment:
  - category 3D (ZONE 22)
- A periodic check must be carried out, especially after maintenance operations, on the equipotential bonding conditions between the different metal parts of the appliance, particularly moving parts and the filter cages.
- Only use antistatic/dissipative components that ensure electrical continuity.
- Before installation and start-up, visually inspect the appliance for any transport damages. The tools used for installation must comply with EN 1127-1 in relation to the area of use. As a preliminary operation, provide earthing and check that it works properly. Earthing is visually indicated by a symbol in accordance with European standards. Carry out the following checks during Start-up:
  - check that the appliance is correctly earthed and there is equipotential bonding between the various parts of the appliance, particularly the moving parts;
  - carry out a blank test with sound check (abnormal noise): if there are any problems, stop the appliance and check that the moving parts are assembled correctly;
  - the electrical wiring must be done by qualified staff and in accordance with the wiring diagram.
- While testing and delivering the appliance, appropriate training must be provided to the operator installing, starting and using the appliance under normal conditions.



- The user must ensure that the plant in which the appliance is to be installed has been adequately safeguarded against explosion before being started and that the "Explosion protection document" has been prepared as required by ATEX Directive 2014/34/EU.
- IT IS FORBIDDEN TO INTRODUCE (VACUUM) IGNITION SOURCES FROM OUTSIDE, including those resulting from self-ignition of dust or embers
- If dusts that can give rise to self-ignition are vacuumed, the collection bin must be emptied immediately after each activity. This precaution must also be taken when vacuuming different types of dust, the mixture of which can give rise to exothermic reactions
- A periodic check must be carried out, especially after maintenance operations, on the equipotential bonding conditions between the different metal parts of the appliance, particularly moving parts and the baskets holding the filter bags
- The installation, assembly and disassembly operations must be carried out on machines switched off and in the absence of a potentially explosive atmosphere.
- The installer must check that the process specifications match the appliance characteristics given on the
  plate (e.g. with reference to the maximum surface temperature). The appliance must not be used to vacuum
  material with incompatible product characteristics.
- The manuals for the ATEX components fitted on the appliance are enclosed: the user must observe all the safety instructions relating to the use of these components
- The appliance must be cleaned by the user to prevent the formation of combustible dust. Do not use compressed air to clean the layers of dust, but use appropriate vacuuming systems for handling potentially explosive dust (ATEX certified vacuum cleaners).
- A specially trained operator must be present at all times during the operation of the appliance and must take
  immediate action by stopping the appliance using the emergency button (where provided) or the emergency
  disconnect switch in case of malfunctions, e.g., abnormal noise (component rupture), clogging of the inlet and
  vent piping, rupture of the filter sleeves, suction of foreign bodies presence or ignition sources.
- For the installation and maintenance of electrical parts (e.g. cables, cable glands and terminals), always follow the guidelines given in EN 60079-14. When opening junction boxes (for inspections), make sure that the gaskets are in place when closing them again.
- The plug is not ATEX certified (or is not supplied): the user must either connect the plug to a socket installed in a SAFE AREA or fit an ATEX plug.
- The hoses, suction inlets and filter bags are antistatic as declared by their respective manufacturers. It is forbidden to use other types of components.
- The building where the appliance is used must have a lightning protection system.
- There must not be any sources of ignition close to the appliance, for example:
  - flames;
  - embers;
  - hot surfaces;
  - sparks (e.g. from metal cutting);
  - stray currents and cathodic protection systems;
  - electrical or mechanical equipment that is not ATEX certified;
  - electrostatic charges carried by operators or portable equipment;
  - radio frequencies (RF) and electromagnetic waves (from 10<sup>4</sup>Hz to 3x10<sup>11</sup>Hz);
  - electromagnetic waves (from 3x10<sup>11</sup>Hz to 3x10<sup>15</sup>Hz);
  - ionizing radiation;
  - ultrasounds.

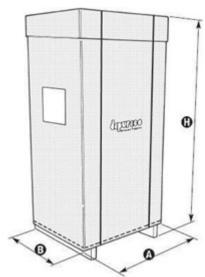


# 3. HANDLING, UNPACKING AND INSTALLATION SECTION

# 3.1. HANDLING

The following instructions also indicate the operations to be carried out if the vacuum cleaner needs to be repacked or unpacked for subsequent transport.

# Packaging dimensions:



	U.M.	А	В	Н
XM 20 - XM 20 JC - XM 20 OVEN	[cm]	80	60	170
XM 35 JC - XM 35 JC LP - MINIBULL	[cm]	80	60	170
XM 20 TM Z22 - XM 20 TT Z22	[cm]	80	60	170
M H PRO ACD	[cm]	80	60	170
M45 H ACD - M45 H ACD INERT	[cm]	80	60	170

The vacuum cleaner must be lifted and then handled by a forklift truck of adequate capacity to withstand the weight

When moving it with a forklift truck, lift the load 200 mm off the ground and tilt it backwards. When lifting the load, take into consideration the height of the work environment.

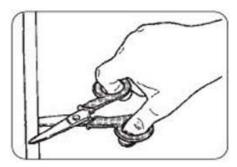
Before starting to move, make sure that the passageway is clear and there are no moving objects on the packaging. For lifting and handling, apply the accident prevention laws in force and the normal handling instructions for forklift trucks.

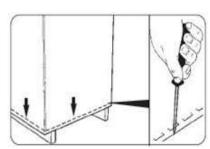
Only move the unit at walking speed, and on slopes with two people if necessary.



# 3.2. UNPACKING

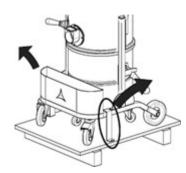
To unpack the machine, cut the fastening strips then remove the retainers with the help of a hammer and a screwdriver and (for versions and models where applicable) remove the cardboard packaging.







Remove all fasteners provided by the manufacturer during packing using suitable tools.



Remove the machine from the support platform with the help of a ramp of suitable capacity and guide the vacuum cleaner using the handle.

Conduct these operations on flat and horizontal surfaces. The load-bearing capacity of the surfaces must be appropriate to the weight of the machine.

Allow ample space around the plant to enable free movement and facilitate easy access for operators in preparation for future maintenance work.



# **ATTENTION!**

Depureco is not liable for any damage caused to the machine during lifting if the appropriate equipment is not used.



# **ATTENTION!**

In the event of subsequent transport, the vacuum cleaner must be anchored to the support platform using a locking system similar to the previously described one.



# **ATTENTION!**

Dispose of packaging materials in accordance with current legislation.



#### 3.3. INSTALLATION

# **ATTENTION!**

Before installing the vacuum cleaner, it is necessary to comply with section 2.2, "Safety requirements".

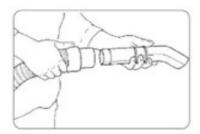


# **ATTENTION!**

Before installing the vacuum cleaner, visually inspect it for any damage that may have occurred during transport.

If any of the components are damaged, it is essential not to continue with installation but to report the anomaly found to Depureco and reach an agreement on the actions to be carried out. The machine is supplied with the filtering unit already installed.

- Insert the hose fitted with a terminal into the suction nozzle fitted with a reducer;
- Insert the appropriate accessory for the type of vacuuming from the opposite side of the hose



Note: the hose with its terminals and suction accessories are not included in the STANDARD equipment. Contact your dealer (or DEPURECO) for information on the different types of OPTIONAL accessories that can be used for this specific vacuum cleaner model.

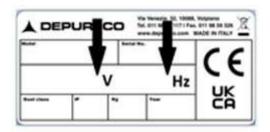
#### Connection to power supply



# ATTENTION!

The following operation must be carried out by an electrician.

Check that the power supply line corresponds to the voltage and frequency indicated on the vacuum cleaner's plate and that it is efficiently earthed.





# ATTENTION!

The vacuum cleaner's power socket must be protected by a mains disconnector switch in accordance with EC standards. Lastly, insert the plug (supplied as standard) into the socket.



# **ATTENTION!**

Do not push the plug into the socket with wet hands. Extension leads are prohibited. Before plugging the vacuum cleaner into the power socket, make sure that:

- The power cable is undamaged and in perfect condition.
- The voltage of the power supply line corresponds to the voltage indicated on the nameplate of the vacuum cleaner.
- The power plug is plugged into the socket correctly.
- The hose is properly inserted and locked in the suction inlet.
- The debris container / Endless Bag is in place and locked on the vacuum cleaner.
- No dust escapes when changing accessories.



# 4. OPERATION SECTION

# 4.1. DESCRIPTION OF THE CONTROLS

# **ATTENTION!**

Before using the vacuum cleaner, it is necessary to comply with section 2.2, "Safety requirements".

# **ATTENTION!**

Only authorised staff who have read these use and maintenance instructions are allowed to use the vacuum cleaner. The appliance user and the maintenance technician who carry out the permitted operations on the vacuum cleaner must receive appropriate information and training, as required by current laws on safety in the workplace, and wear the personal protective equipment (PPE) provided for the different operations, such as safety footwear, gloves, safety goggles, mask, etc. The user must adhere to the current provisions for vacuumed materials and their disposal.

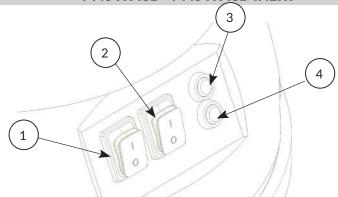
# ATTENTION!

Before using it again, the personnel in charge must ensure that the normal safe operating conditions of the vacuum cleaner are met, particularly regarding the safety devices and protective guards involved in the operation.

# **ATTENTION!**

In the event of prolonged breaks in operation and at the end of use, turn off the appliance using the appliance switch and disconnect the mains plug.

# XM 20 - XM 20 OVEN - XM 20 JC - XM 35 JC - XM 35 JC LP - MINIBULL - M H PRO ACD - M45 H ACD INERT



- 1. Switch ON-OFF first motor
- 2. Switch **ON-OFF second motor**
- 3. White indicator light PRESENCE OF VOLTAGE
- 4. Red indicator light INTACTION FILTER

#### **REMOTE CONTROL - OPTIONAL**

Schuko 24 V socket for power supply and remote control from power tools (max 2000 W).



# WARNING!

Danger of electric shock.

PDanger of injury and damage. The socket is intended only for direct connection of power tools to

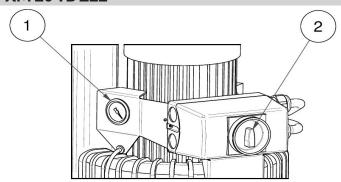
the socket. Any other use of the socket is not allowed.

#### How to use it:

- Insert the plug of the power tool into the suction cup.
- The vacuum cleaner is in stand-by mode.
- Turn on the power tool.
- If set to AUTOMATIC mode the vacuum cleaner will automatically turn on and off.



# XM 20 TM Z22 - XM 20 TB Z22



- 1. Pressure Gauge: indicates filter clogging
- 2. Switch ON-OFF

# 4.2. WORK CYCLE

Before starting suction, the requirements of section 2.2 "Safety requirements" must be complied with. In particular:

- Make sure the power supply cable is undamaged and in perfect state.
- Before plugging into the power socket, make sure that the voltage of the power supply line matches the one indicated on the data plate of the appliance.
- Make sure the power plug is plugged into the socket correctly.
- Make sure that the vacuum arm or hose is properly inserted and locked into the vacuum nozzle.
- Make sure that the debris container is in place and locked under the vacuum cleaner chamber.
- Make sure that the Endless Bag s in place and locked under the vacuum cleaner chamber.



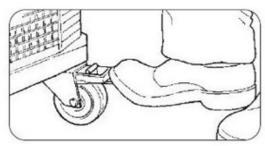
Use the handle on the back of the machine to move the vacuum cleaner (Item.10 Section 1.2).

# **ATTENTION!**

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

To start vacuuming, please follow these steps:

• Lock the vacuum cleaner by means of the lever on the swivel wheels, as shown in the figure. Use the handle on the back of the machine to move the vacuum cleaner.



• Grip the end of the hose with the chosen suction accessory or place the end of the suction arm at the suction point.

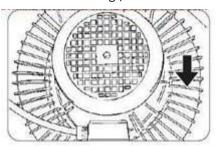
# XM 20 - XM 20 OVEN - XM 20 JC - XM 35 JC - XM 35 JC LP - MINIBULL - M H PRO ACD - M45 H ACD - M45 H ACD INERT

- Activate one of the switches (Items 1 and 2 section 4.1) and start vacuuming.
- For greater suction power activate the second motor and/or third motor with the others switchs.
- To turn the vacuum off the previously activated motors must be deactivated.

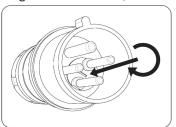


#### XM 20 TM Z22 - XM 20 TB Z22 XM 20 TM Z22 - XM 20 TB Z22

• Turn the switch from **O** to **I** "1" to start vacuuming (Items 2 section 4.1).



- Check that the direction of fan rotation is as indicated by the arrow in the figure
- If the direction of rotation of the engine is not correct, insert a screwdriver into the notch inside the plug



and reverse the two poles with a rotation of 180° (for versions and models where applicable).

• Turn the switch from I to O [1] to stop vacuuming.

# **ATTENTION!**

Before turning on the vacuum cleaner again, make sure that the pump has stopped completely.

#### **ALL MODELS**

# ATTENTION!

Do not step on, crush, pull or damage the mains power cable during operation. Do not unplug the cable from the mains by pulling the cable (pull the plug). In case you need to replace the power supply cable, replace it only with one of the same type as the original. Replacement must be carried out by the manufacturer or equivalent qualified personnel.

Personnel responsible for plant safety must ensure that:

- Any improper use or action is avoided.
- Safety devices are not removed or tampered with.
- Regular maintenance work is carried out.
- Machine parts (attachments, holes, etc.) must not be modified for any reason to fit additional devices.
- Only use original Depureco spare parts.
- Avoid rolling or bending the hose while vacuuming.

# **ATTENTION!**

If dust is escaping from the vacuum cleaner head, the filter may have broken. In this case, the vacuum cleaner should be stopped immediately.



# 4.3. AIR SPEED CONTROL

# XM 20 - XM 20 OVEN - XM 20 JC - XM 35 JC - XM 35 JC LP - MINIBULL - M H PRO ACD - M45 H ACD - M45 H ACD INERT

A pressure gauge is installed in the front of the unit (Item 4 section 4.1), which indicates the vacuum level inside the vacuum cleaner. As the vacuum increases, there is a proportional reduction in suction power.

# XM 20 TM Z22 - XM 20 TB Z22

A pressure gauge is installed in the front of the unit (Item 4 section 4.1), which indicates the vacuum level inside the vacuum cleaner. As the vacuum increases, there is a proportional reduction in suction power.

# **ALL MODELS**

- Check the hose and/or suction accessory for clogging and eliminate the cause of clogging.
- Run a filter cleaning cycle (section 4.4).
- Stop work and replace filters.



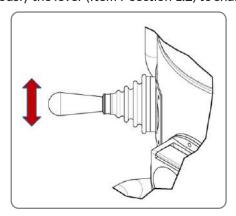
Never use the vacuum cleaner with the filter clogged.

# 4.4. FILTER CLEANING CYCLE

It is advisable to perform a filter cleaning cycle every 20 minutes of use or if you notice a drop in performance. To carry out a filter cleaning cycle, proceed as follows:

#### XM 20 - XM 20 OVEN - MINIBULL - M45 H ACD

- Switch off the machine.
- Wait for the motors to come to a complete stop.
- Lift and then lower vigorously the lever (Item 7 section 1.2) to shake the inner filter.





# XM 20 JC- XM 35 JC - XM 35 JC LP - XM 20 TM Z22 - XM 20 TB Z22

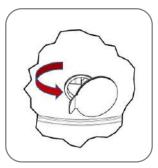
The vacuum cleaners in the "JC" and "TAN JC"models, are equipped with the JetClean® cleaning system. The system works thanks to the difference in pressure between the internal atmosphere and the external atmosphere leading to the dust becoming detached from the filtering fabric of the cartridge, without needing to switch the vacuum cleaner off.

To carry out a filter cleaning cycle, proceed as follows:

• With the vacuum cleaner turned on, lift the sliding damper (Item 9 section 1.2) on the inlet.



• Open and quickly release the JetClean® valve (Item 8 section 1.2) and repeat this operation a couple more times.



• Lower the shutter and resume normal use



#### **ALL MODELS**

If the vacuum cleaner does not work properly after the filter has been cleaned, the main filter may need replacing (see dedicated chapter). If the vacuum does not significantly improve after replacing the filter, it means that another issue may be present (see chapter "If something doesn't work")



Never use the machine if the filter is clogged.



If dust is escaping from the silencer, the filter may have broken. In this case, it is necessary to immediately switch off the vacuum cleaner and verify the cause.



# 4.5. EMPTYING THE CONTAINER

# A

# **ATTENTION!**

The container/Endless Bag must not only be emptied when full, but also at the end of each use and before the vacuum cleaner is transported. During this operation, use the appropriate PPE (gloves, dust mask, goggles, etc.).



Depending on the type and amount of material vacuumed, the debris container/Endless Bag should be checked periodically to prevent it from being overfilled.

# A

# **ATTENTION!**

Before emptying the container, it is necessary to lock the vacuum cleaner by means of the lever on the swivel wheels.

# XM 20 - XM 20 OVEN - XM 20 JC - XM 20 TM Z22 - XM 20 TB Z22

- Unlock the container using the locking hooks (Item 6 Section 1.2).
- Remove the container (Item 4 Section 1.2) under the filter chamber
- Empty the debris in a dedicated waste disposal bin in accordance with local legislations



If a plastic bag is used to collect the debris, replace as follows:

• After removing the container, tie the bag, take it out and insert a new bag.



# ATTENTION!

If the container weighs more than 15 Kg, at least two people are needed to empty it.

# **ATTENTION!**

Waste must be disposed of in compliance with the laws in force in the country where the vacuum cleaner is used - for Italy, Legislative Decree 152/2006 as amended.

Clean the appliance inside and out by vacuuming and with a damp cloth.

When vacuuming, use a vacuum cleaner with an equal or better rating.



# **E**ATTENTION!

If dusts that can give rise to self-ignition are vacuumed, the collection bin must be emptied immediately after each activity.

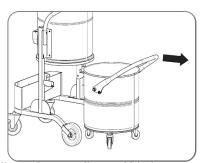
This precaution must also be taken when vacuuming different types of dust, the mixture of which can give rise to exothermic reactions.

# XM 35 JC - MINIBULL - M45 H ACD

Unlock the container by lifting the special handle (Item 5 Section 1.2).



• Remove the container (Item 4 Section 1.2) under the filter chamber



• Empty the debris in a dedicated waste disposal bin in accordance with local legislations.



If a plastic bag is used to collect the debris, replace as follows:

• After removing the container, tie the bag, take it out and insert a new bag.





# **ATTENTION!**

If the container weighs more than 15 Kg, at least two people are needed to empty it.

# ATTENTION!

Waste must be disposed of in compliance with the laws in force in the country where the vacuum cleaner is used - for Italy, Legislative Decree 152/2006 as amended.

Clean the appliance inside and out by vacuuming and with a damp cloth.

When vacuuming, use a vacuum cleaner with an equal or better rating.

# **E**ATTENTION!

If dusts that can give rise to self-ignition are vacuumed, the collection bin must be emptied immediately after each activity.

This precaution must also be taken when vacuuming different types of dust, the mixture of which can give rise to exothermic reactions.

#### M H PRO ACD

- Unlatch the HEPA filter chamber (Item 13 Section 1.2) from the locking hooks (G) and lift it off the container with its entire head and place it on the workbench.
- Empty the debris in a dedicated waste disposal bin in accordance with local legislations.



If a plastic bag is used to collect the debris, replace as follows:

• After removing the container, tie the bag, take it out and insert a new bag.



# **ATTENTION!**

If the container weighs more than 15 Kg, at least two people are needed to empty it.

# ATTENTION!

Waste must be disposed of in compliance with the laws in force in the country where the vacuum cleaner is used - for Italy, Legislative Decree 152/2006 as amended.

Clean the appliance inside and out by vacuuming and with a damp cloth.

When vacuuming, use a vacuum cleaner with an equal or better rating.



# **&**ATTENTION!

If dusts that can give rise to self-ignition are vacuumed, the collection bin must be emptied immediately after each activity.

This precaution must also be taken when vacuuming different types of dust, the mixture of which can give rise to exothermic reactions.

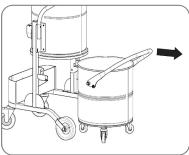
#### M45 H ACD INERT

Empty the container of the inert liquid, following the instructions here:

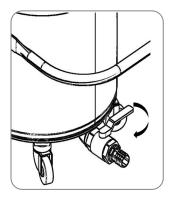
• Unlock the container by lifting the special handle (Item 5 Section 1.2).



• Remove the container (Item 4 Section 1.2) under the filter chamber and take it to the inert liquid collection/disposal site.



• Turn the lever on the ball valve by 90° and then empty the container.



- When the collection container is completely emptied, return the lever to the initial position.
- Clean the appliance inside and out by vacuuming and with a damp cloth. When vacuuming the appliance, use a vacuum cleaner with an equal or better rating.

# **ATTENTION!**

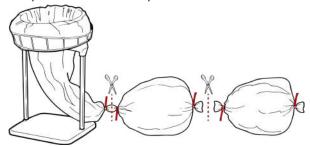
For proper disposal of wastewater, follow local regulations.

37



#### XM 35 JC LP

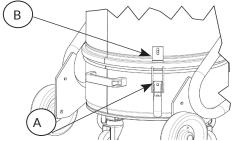
The material is collected inside a robust plastic bag called an Endless Bag that is 20 metres long. The bag is rolled underneath the chamber and can be adapted to any requirement. The operator, once the bag is filled, can close it over the vacuumed material that automatically falls into it, seal it, cut the bag segment with the debris and dispose of it safely, without any contact between operator and material.



### 4.6. INSERTING AND LOCKING THE CONTAINER

#### XM 20 - XM 20 OVEN - XM 20 JC - XM 20 TM Z22 - XM 20 TB Z22

Insert the container under the vacuum cleaner, aligning the closing hooks (A) with the stops (B) on the filter chamber.



Lift the container towards the chamber and secure the locking hooks..

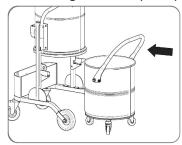
# **ATTENTION!**

Danger of crushing upper limbs!

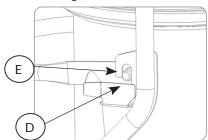
Never insert hands between the container and the vacuum cleaner when locking it.

#### XM 35 JC - MINIBULL - M45 H ACD

Place it under the vacuum cleaner while holding the lever up and push until it reaches the stops.



• The "D" pins on both sides must be aligned with "E" the slots.





• Push the container locking lever all the way down with both hands.



### **ATTENTION!**

Danger of crushing upper limbs!

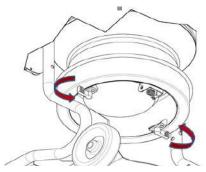
Never insert hands between the container and the vacuum cleaner when locking it.

Use **BOTH HANDS** to lock the container by pushing the lever.

#### XM 35 JC LP

To replace the Endless bag, proceed as follows:

- Turn off the machine.
- Rotate the hooks under the filter chamber to unlock the bag's support ring.



- Pull out the ring and remove the last portion of the bag.
- Place the new bag inside the ring.
- Place the bag support ring under the chamber and lock it with the hooks.
- Pull down the outer flap of the bag to the bottom of the vacuum pool cleaner and close the lower part of the bag with the clamp provided.

To watch the Endless Bag installation and replacement operation video, frame the **QR-CODE** below:



#### M H PRO ACD

• Place the head together with the HEPA filter chamber (Item 13 Section 1.2) on the container and lock it onto the container with the locking hooks (G).



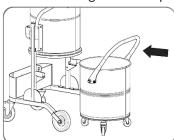
Danger of crushing upper limbs!

Never insert hands between the container and the vacuum cleaner when locking it. Use <u>BOTH HANDS</u> to lock the container by pushing the lever.



#### M45 H ACD INERT

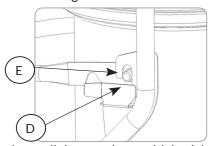
• Place it under the vacuum cleaner while holding the lever up and push until it reaches the stops.



• Check that the sticker (showing an arrow) on the container matches the one on the chamber..



• The "D" pins on both sides must be aligned with "E" the slots.



• Push the container locking lever all the way down with both hands.



# **ATTENTION!**

Danger of crushing upper limbs!

4.7. STORAGE - DECOMMISSIONING

Never insert hands between the container and the vacuum cleaner when locking it. Use <u>BOTH HANDS</u> to lock the container by pushing the lever.

Remove the filter and clean it, empty the debris container and store the vacuum cleaner in a place sheltered from adverse weather with a temperature between  $5^{\circ}$  and  $45^{\circ}$ C, then cover it with a nylon sheet to prevent dust from settling on it.



#### 5. MAINTENANCE SECTION

# **ATTENTION!**

Extraordinary maintenance of the vacuum cleaner may only be carried out by specialised technicians approved by the DEPURECO dealer.

#### **5.1. INFORMATION NOTES**

The utmost reliability of the vacuum cleaner and the minimum maintenance cost are due to a planned maintenance and inspection program that is meticulously followed throughout the entire service life of the vacuum cleaner. It is important to:

- Strictly follow the set maintenance times and intervention frequencies according to the specific needs of the vacuum cleaner's production cycle.
- Always use tools in perfect condition and specific for the operation to be carried out; using unsuitable and inefficient tools can cause serious damage.
- Any other intervention deemed necessary to eliminate faults or malfunctions must be expressly authorised by the manufacturer.
- For major repairs, it is advisable to contact the authorised dealer whose specialised personnel, equipped with all the technological expertise of the original factory construction, are always on call and able to intervene promptly.
- If maintenance is to be carried out by the user, it is necessary to disassemble, clean and carry out maintenance on the vacuum cleaner, provided that this is possible, without causing dangers for maintenance staff and third parties. Appropriate precautionary measures include decontamination before disassembly, measures for forced filtered ventilation in the room where the appliance is to be disassembled, cleaning of the maintenance area and suitable personal protective equipment.
- At least once every three months (or more frequently depending on the work cycle and the conditions of
  use), the manufacturer or qualified person must inspect the filters to make sure that they are not damaged
  and also ensure that the control devices work properly.

# **ATTENTION!**

After maintenance work or repairs are carried out, all contaminated objects that cannot be satisfactorily cleaned must be put in waterproof bags and disposed of in compliance with the laws in force

#### **5.2. GENERAL SAFETY STANDARDS**

# **ATTENTION!**

All maintenance, repair or cleaning operations must be carried out with the plug disconnected from the power socket (and the air disconnected for the SP system). Wear suitable PPE (protective clothing, safety goggles and/or gloves, etc.) for the work to be carried out.

Put a sign on the vacuum cleaner that says:

#### "MACHINE UNDER MAINTENANCE DO NOT START"

Before resuming service, check the entire system again according to the start-up procedures.

After each maintenance operation, run a few test cycles to ensure that the machine works properly. Failure to observe these precautions can cause serious harm to staff.

Maintenance work must be carried out by specialist technicians who are trained in the specific sectors which for this machine are:

- Mechanical maintenance;
- Electrical maintenance.

It is the precise duty of the **Safety Manager** to ensure the professionalism and competence of the aforementioned people.



Before starting a maintenance intervention, the Safety Manager must:

- Have any unauthorised people moved out of the work area;
- Make sure that the necessary tools are within reach of the maintenance technician and are in good condition;
- Make sure that the maintenance technician has the personal protective equipment necessary for the specific operation (gloves, goggles, shoes, mask, etc.).
- Make sure that the maintenance technician has carefully read the instructions in this manual and is completely familiar with operation of the vacuum cleaner and its components.
- Ensure that there is enough light and, if necessary, provide portable 24 V lamps.

Before starting a maintenance intervention, the Maintenance Technician must:

- Disconnect all power supply;
- Put the vacuum cleaner in a safety lockout condition;
- Disconnect the compressed air connection (where applicable).

# ATTENTION!

If it is absolutely necessary to perform maintenance operations with the power on, as stipulated by Italian Legislative Decree 81/08, the maintenance technician must maintain a safe distance, keep emergency stop buttons within reach, and avoid placing their hands in the discharge container.

When the intervention has been completed and before resuming the service, the maintenance technician must check operation of the safety devices again and ensure that the protections are intact.

Work on the motors or on other electrical components must only be carried out by an appropriately trained electrical maintenance technician who is authorised by the Safety manager.

# **ATTENTION!**

After each maintenance operation, it is mandatory for the Safety Manager to ensure that the vacuum cleaner and its protection devices are safe.

#### Before each work shift:

- Check that the power cable and plug are undamaged: replace immediately if there are signs of wear and tear, using a cable of the same type (information c/o DEPURECO); this is the exclusive responsibility of an electrician.
- Ensure that the safety symbols (pictograms) affixed to the vacuum cleaner are intact.
- Make sure that the debris container is empty and locked under the vacuum cleaner.
- Check that the filter is working properly by checking the warning light or vacuum gauge.
- Regularly inspect the vacuum hose and accessories to ensure that they are all intact.

# **ATTENTION!**

If the hose is pierced, the vacuum power will be reduced and the dust will be dispersed into the air.



### **5.3. REPLACING THE MAIN FILTER**

### **ATTENTION!**

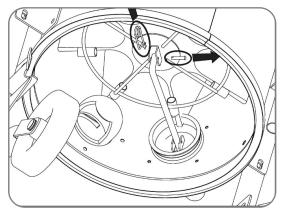
Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).

Replace the star filter as follows:

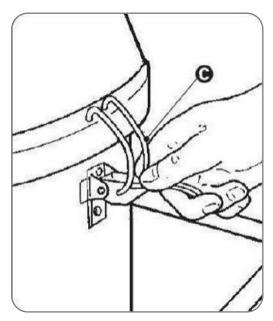
- Switch off the machine by turning the switch from I to O.
- Disconnect the vacuum cleaner from the power supply.

#### XM 20 - XM 20 OVEN - MINIBULL

- Remove the container as described in section 4.5.
- From the underside of the filter chamber, unhook the clip and pull out the pin securing the cage to the filter-shaking lever.



• Unlock the "C" hooks on the sides of the head base on the filter chamber.

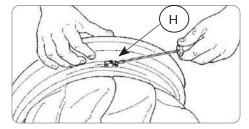




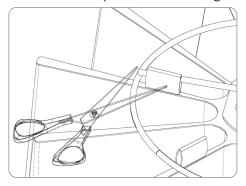
- Remove the vacuum's head and place it on a work bench.
- Slip out the filter (F) and place it on a work bench.



• Loosen the fastening clip (H), remove the filter from its support.



• With scissors cut the lower belts that clamp it to the filter's cage.

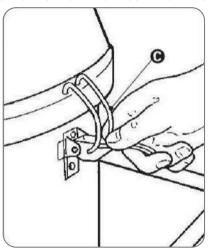


# **ATTENTION!**

Use appropriate lifting straps for the total weight of the motor base.

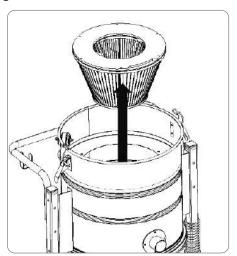
#### XM 20 JC - XM 35 JC - XM 35 JC LP

• Unlock the "C" hooks on the sides of the head base on the filter chamber.



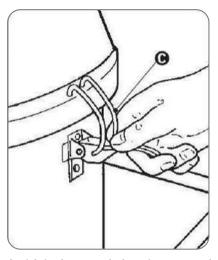


- Remove the vacuum's head and place it on a work bench.
- Unscrew the filter cartridge end remove it from inside the chamber.

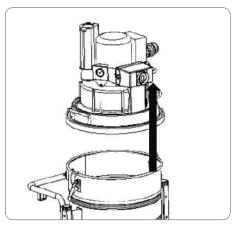


### XM 20 TM Z22 - XM 20 TB Z22

• Unlock the "C" hooks on the sides of the head base on the filter chamber.

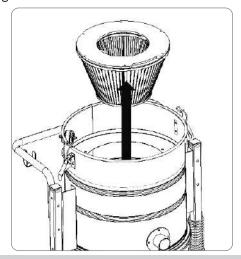


• Remove the vacuum's head with its base and place it on a work bench.





• Unscrew the filter cartridge end remove it from inside the chamber.

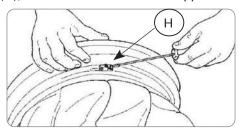


### M H PRO ACD

- Remove the container as described in section 4.5.
- Slip out the filter (F) and place it on a work bench.

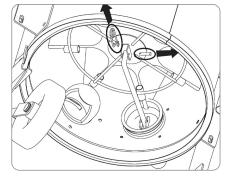


• Loosen the fastening clip (H), remove the filter from its support.



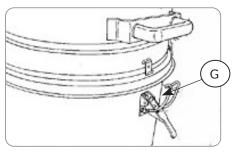
### M45 H ACD

- Remove the container as described in section 4.5.
- From the underside of the filter chamber, unhook the clip and pull out the pin securing the cage to the filter-shaking lever.





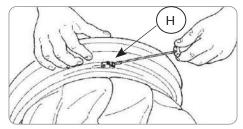
• Unlatch the HEPA filter chamber (Item 13 Section 1.2) from the locking hooks (G) and lift it off the container with its entire head and place it on the workbench.



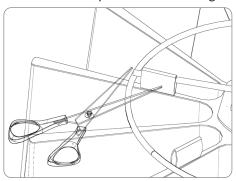
• Slip out the filter (F) and place it on a work bench.



• Loosen the fastening clip (H), remove the filter from its support.



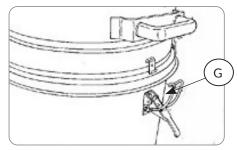
• With scissors cut the lower belts that clamp it to the filter's cage.



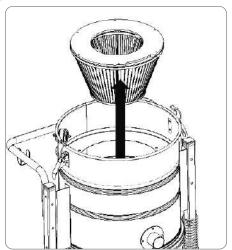


#### M45 H ACD INERT

• Unlatch the HEPA filter chamber (Item 13 Section 1.2) from the locking hooks (G) and lift it off the container with its entire head and place it on the workbench



• Unscrew the filter cartridge end remove it from inside the chamber.



### **ALL MODELS**

# **ATTENTION!**

Remove the filter, put it in a plastic bag, close it and **dispose of it according to the laws in force** for the type of material vacuumed.

△ USE ONLY DEPURECO ORIGINAL HEPA FILTERS!

△ TO MOUNT THE NEW FILTER, REVERSE THE STEPS PREVIOUSLY DESCRIBED.



### **5.4. REPLACING THE HEPA FILTER**

### **ATTENTION!**

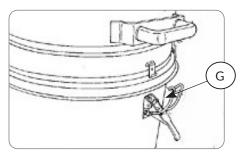
Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).

Replace the HEPA filter as follows:

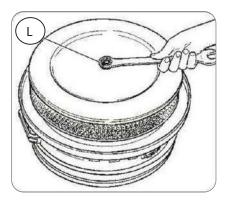
- Switch off the machine.
- Disconnect the vacuum cleaner from the power supply.

### MHPROACD-M45HACD-M45HACDINERT

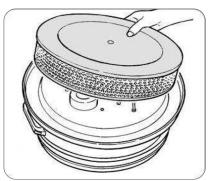
• Unlatch the HEPA filter chamber (Item 13 Section 1.2) from the locking hooks (G) and lift it off the container with its entire head and place it on the workbench



- Place the vacuum's head on the work bench.
- Unscrew the nut (L) of the HEPA filter.



Remove the filter from the vacuum's head.

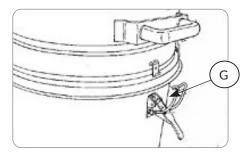




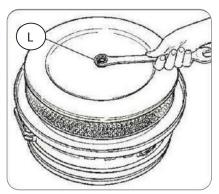
#### **HEPA FILTER - OPTIONAL**

#### XM 20 - XM 20 OVEN - MINIBULL

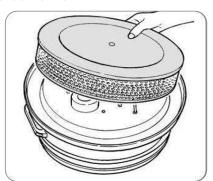
• Unlatch the HEPA filter chamber from the locking hooks (G) and lift it off the container with its entire head and place it on the workbench



- Place the vacuum's head on the work bench.
- Unscrew the nut (L) of the HEPA filter.



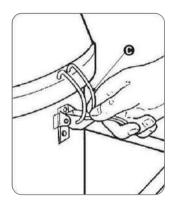
• Remove the filter from the vacuum's head.



#### **HEPA FILTER - OPTIONAL**

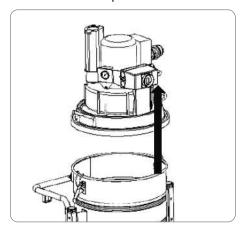
#### XM 20 TM Z22 - XM 20 TB Z22

• Unlock the "C" hooks on the sides of the head base on the HEPA filter chamber.

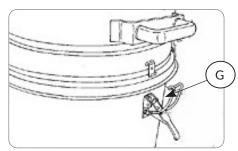




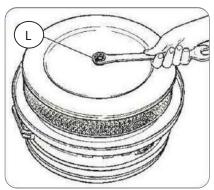
• Remove the vacuum's head with its base and place it on a work bench.



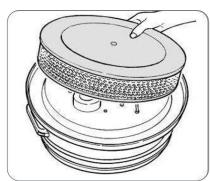
• Unlatch the HEPA filter chamber from the locking hooks (G) and lift it off the container with its entire head and place it on the workbench



- Place the vacuum's head on the work bench.
- Unscrew the nut (L) of the HEPA filter.



• Remove the filter from the vacuum's head.

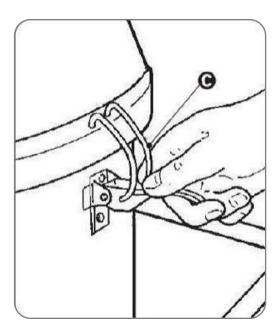




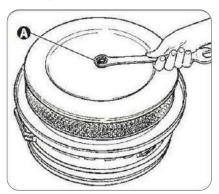
### **HEPA FILTER - OPTIONAL**

### XM 20 JC - XM 35 JC - XM 35 JC LP

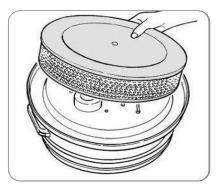
• Unlock the "C" hooks on the sides of the head base on the filter chamber.



- Place the vacuum's head on the work bench.
- Unscrew the nut (L) of the HEPA filter.



• Remove the filter from the vacuum's head.





### **ALL MODELS**

# **ATTENTION!**

Remove the filter, put it in a plastic bag, close it and **dispose of it according to the laws in force** for the type of material vacuumed.

△ USE ONLY DEPURECO ORIGINAL HEPA FILTERS!

△ TO MOUNT THE NEW FILTER, REVERSE THE STEPS PREVIOUSLY DESCRIBED.



### 5.5. MAINTENANCE AND REPLACEMENT OF INERTING KIT FILTERS

#### M45 H ACD INERT

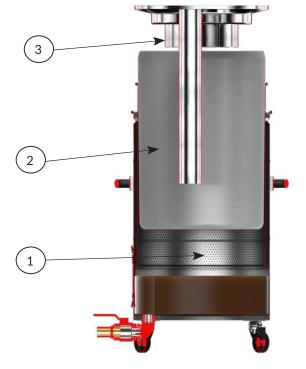
# **ATTENTION!**

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

The inerting kit is located inside the inert liquid container.

Inside the container there are 3 levels of filtration to guarantee the highest safety standards, even when sucking in potentially explosive dust.:

- 1. Metal grid filter to trap any sparks.
- 2. Nylon filter that separates metal powders from the inert liquid, allowing them to be recovered and reused.
- 3. Metal straw filter that retains oil mist.

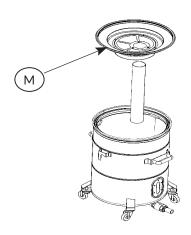


# **ATTENTION!**

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

For the **nylon filter**(2) maintenance, proceed as follows:

- Switch off the machine.
- Disconnect the vacuum cleaner from the power supply.
- Remove the container (Section 4.5).
- Remove the conical holder (M) complete with metal straw filter and immersion tube from the container.



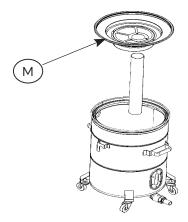


• Pull the nylon filter out of the basket to arrange for its cleaning/washing (or replacement if necessary).

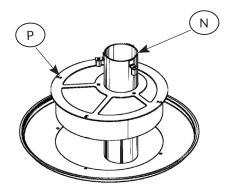


### For the metal straw filter(3) maintenance, proceed as follow:

 Remove the conical holder (M) complete with metal straw filter and immersion tube from the container and place it on a workbench.



- Using the appropriate equipmen, unscrew the 3 screws of the immersion tube (N) and pull it out from inside the metal grid filter, taking care to retain the 3 spacers.
- Unscrew the 4 screws (P) and pull the metal staw filter to arrange for its cleaning/washing (or replacement if necessary).



# **ATTENTION!**

Remove the filter, put it in a plastic bag, close it and **dispose of it according to the laws in force** for the type of material vacuumed.

△ USE ONLY DEPURECO ORIGINAL HEPA FILTERS!
△ TO MOUNT THE NEW FILTER, REVERSE THE STEPS
PREVIOUSLY DESCRIBED.



### 5.6. IF SOMETHING DOESN'T WORK

FAULT FOUND	POSSIBLE CAUSE	RECOMMENDED SOLUTION
The vacuum cleaner does not start	No power	<ul> <li>Check the power socket for voltage;</li> <li>Check the socket and power supply cable to make sure they are intact;</li> <li>Contact the DEPURECO technical assistance service.</li> </ul>
The red light on or vacuum gauge indicates an irregular	Clogged filter	Shake the filter. If this is not enough, replace it.
depression	Clogged suction pipe	Check the suction hose and clean it.
Dust coming out of the vacuum cleaner	Pierced filter	Replace the filter
	Filter not suitable for the type of material to be vacuumed	Fit a filter suitable for the type of material to be vacuumed
Excessively noisy engine	Faulty pump	Contact the DEPURECO technical assistance service

### **5.7. SCRAPPING**

# **ATTENTION!**

In case of scrapping, in order to avoid damage to the environment, all vacuum cleaner components must be disposed of responsibly, in appropriate landfill sites in accordance with the relevant national regulations. Vacuum cleaner parts made of plastic, aluminium and steel can be recycled by disposing of them in the appropriate collection centres.

The crossed-out wheelie bin symbol on the appliance's label indicates the compliance of this product with the legislation on waste electrical and electronic equipment. Abandoning the appliance in the environment or its illegal disposal is punishable by law.

#### REGISTERED ON THE WEEE REGISTER WITH NO. IT18090000010711







### **MAINTENANCE LOG**

MODEL:	
SERIAL NUMBER:	
DELIVERY DATE:	
COMPANY:	
STREET:	STREET NUMBER.
CITY:	POSTCODE:
SECTOR	
TELEPHONE:	
PERSON IN CHARGE:	
STAMP:	

#### **Depureco Industrial Vacuums Srl**

 $Company \ under \ the \ direction \ and \ coordination \ of \ COFISE \ S.p.A.$ 





INTERVENTION 1:	DATE:
TECHNICAL ASSISTANCE:	
TYPE OF INTERVENTION:	
INITEDVENITION 2	DATE
INTERVENTION 2:	DATE:
TECHNICAL ASSISTANCE:	DATE:
TECHNICAL ASSISTANCE:	

#### **Depureco Industrial Vacuums Srl**

 $Company \ under \ the \ direction \ and \ coordination \ of \ COFISE \ S.p.A.$ 





INTERVENTION 3:	DATE:
TECHNICAL ASSISTANCE:	
TYPE OF INTERVENTION:	
INTERVENTION 4:	DATE:
	<i>5</i> , (12.
TECHNICAL ASSISTANCE:	
TYPE OF INTERVENTION:	
TYPE OF INTERVENTION:	
TYPE OF INTERVENTION:	

#### **Depureco Industrial Vacuums Srl**

Company under the direction and coordination of COFISE S.p.A.