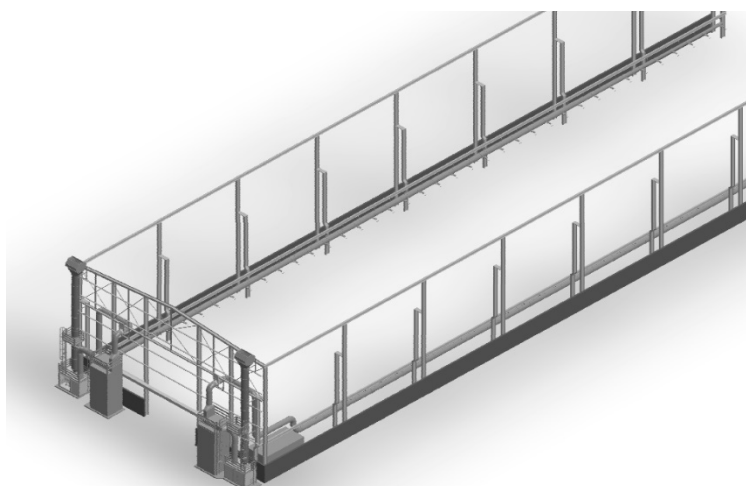


# UniAir

## USE AND MANTENANCE MANUAL



PROGETTAZIONE



PRODUZIONE



INSTALLAZIONE



AZIENDA

## **PNEUMATIC WASHING DUST FILTER USE AND MAINTENANCE MANUAL**

### **INDEX**

#### **1 GENERAL INFORMATION**

- 1.1 Purpose of the manual

#### **2 GENERAL SAFETY RULES**

- 2.1 Information on explosion hazards and zone identification  
2.2 Warnings and precautions for operating in classified areas  
2.3 Ignition sources in classified areas  
2.4 Atex protection systems installed in the plant  
2.5 Characteristics of personnel working in classified areas.  
2.6 Operating method in case of failure

#### **3 HOW THE MACHINE IS MADE**

- 3.1 Intended use  
3.2 General description  
3.3 Identification of the aspirant group  
3.4 Overall dimensions

#### **4 INSTALLATION AND COMMISSIONING**

- 4.1 Verification / safety standards  
4.2 Electric connection

#### **5 PERIODIC MAINTENANCE**

- 5.1 Safety standards  
5.2 Scheduled cleaning/maintenance table







#### **6 COPYRIGHT**

## PNEUMATIC WASHING DUST FILTER

### USE AND MAINTENANCE MANUAL

#### 1. GENERAL INFORMATION

Read the instructions carefully to know the safety symbols:

SIMBOLO	SIGNIFICATO	COMMENTO
	ATTENTION DANGER	Indicates dangerous situations with generic risk, indicated by the exclamation point and detailed by the description on the side, or specific risk indicated by the relative pictogram
	READ THE MANUAL	Remember the obligation to read and observe the provisions of this manual or refer to other sections of the manual
	WARNIG	Indicates operations that require particular attention or a note on useful information or suggests paying attention to regulatory references
	OBLIGATION	It prescribes the obligation to use the personal protective equipment indicated in the pictogram
	PROHIBITION	It prescribes the prohibition of carrying out certain operations or behaviors indicated by the pictogram
	LIFTING BY ROPES	Indicates the appropriate hooks for lifting by ropes

This manual is an integral part of the supply. It contains information certifying the conformity of the product and all the information for its correct use and maintenance.

The company UniAir s.r.l. assumes no responsibility for damage caused by uses other than those described in this manual.



## PNEUMATIC WASHING DUST FILTER USE AND MAINTENANCE MANUAL

### 1.1 PURPOSE AND CONTENT OF THE MANUAL

This manual has the purpose of transmitting to the personnel in charge the way of use and the correct maintenance of the machine indicated above according to the manufacturer's instructions.

In order to learn briefly how to operate and use the machine, it is necessary to carefully read this use and maintenance manual from the very first start-up.

The good functioning of the machine largely depends on efficient and effective maintenance. Knowledge of maintenance work is, therefore, necessary.

Clearly the indications for the functioning and the working methods are limited to basic notions, in fact, only through use and experience, the working technique will improve and the potential of the machine can all be exploited to the fullest.

The indications for use indicate all the operations for good and safe operation, it being understood that the operator's experience is the best guarantee of optimal use of the filter.

The filter unit is built in compliance with all the safety requirements (considered pertinent) foreseen by the directives on the subject, however, the maximum safety of the operator as well as that of other people depends on careful reading of this manual and on cleaning and constant and careful maintenance.

However, caution is always the best defense against accidents.

Some information or figures in this manual may show details and parts that may differ slightly from those of the filters, without however changing the essential information. Based on constant improvement, the machine may show variations that are not contained in this manual. Any changes will appear, as needed, in subsequent versions of the manual.













Uniair s.r.l. declines all responsibility for damage caused by improper use of the equipment produced. The company reserves the right to prosecute all those who make modifications, without written authorization, to the machines of its production.

## PNEUMATIC WASHING DUST FILTER

### USE AND MAINTENANCE MANUAL

## 2 GENERAL SAFETY RULES

	Read this manual carefully before using the machine
	Carefully read and observe all the danger warnings and occupational safety regulations issued by the bodies in charge of each country.
	Always carry out the checks, checks and scheduled maintenance described in chapter 5
	Carefully read and observe all the danger warnings indicated by the specific adhesive labels applied to the machine.
	The operator must be informed and instructed on the functioning of the filter before being able to operate independently, guaranteeing his own safety and that of others
	Always take care of perfect cleanliness and always keep the safety devices efficient
	Absolute prohibition of removing the guards installed by the manufacturer.
	Keep children away.
	Do not remove, for any reason, the adhesive labels placed on the filter; in case of deterioration, ask for their replacement.
	<b>It is absolutely forbidden to use the machine for uses other than those envisaged by the INTENDED USE (par. 3.1)</b>

### 2.1 INFORMATION ON EXPLOSION HAZARDS AND IDENTIFICATION OF ZONES

For a better explanation and assessment of the explosion risks, the product has been divided into three areas: **AREA 1 - Filter elements**

**AREA 2 – Centrifugal fan**

**AREA 3 - External area**

**AREA 1** - Inside the room housing the filter elements, the area is a classified area 22 both when the system is running and when it is stopped.







**AREA 2** - The centrifugal fan is positioned inside the area and in situations with the system stopped, the whole room is classified as zone 22.

**AREA 3** - The whole area outside the filter from the dust insertion points to the sediment plane are (for safety) classified as zone 22 up to a distance of about 20 cm from the edge.

## PNEUMATIC WASHING DUST FILTER






### USE AND MAINTENANCE MANUAL

## 2.2 WARNINGS, PRECAUTIONS FOR OPERATING IN CLASSIFIED AREAS

	Do not carry out any type of intervention or movement with the machine running.
	Before any intervention, make sure that, once the system has been stopped, any dusty atmosphere has settled (there must be no dust scattered in the air)
	Never blow air into the filter
	Do not use any type of equipment that may cause ignition sources. It is absolutely forbidden to use naked flames and to smoke.
	In case of use of suction systems for cleaning and for unloading the material inside the equipment, position any suction systems outside the classified areas at a minimum distance of 1 m
	In order to use electrical equipment (lamps tools) make sure that these comply with the regulations required for compliance with operating in zones classified for explosion hazard






## 2.3 IGNITION SOURCES IN CLASSIFIED ZONES

When operating in areas with a high explosive level, pay the utmost attention to:


	Static electricity
	Sparks due to friction, shocks or movements
	Electromagnetic waves due to the use of cordless or cellular phones
	Do not use any type of equipment that may cause ignition sources. It is absolutely forbidden to use naked flames and to smoke.
	Due ignition and unsuitable electrical components

## PNEUMATIC WASHING DUST FILTER USE AND MAINTENANCE MANUAL


### 2.4 ATEX PROTECTION SYSTEMS INSTALLED IN THE PLANT (ONLY IF THE INSTALLED SYSTEM IS ATEX)

	Suction fan Atex group II, category 3D
	Electric motor Atex group II, category 3D
	Filter cartridges of the dust collector in antistatic fabric
	Explosion-proof panels on the filter edge Atex certified necessary to direct any explosions
	Compressed air tank and relative solenoid valves are of the Atex group II, category 3D type

### 2.5 CHARACTERISTICS OF THE PERSONNEL WORKING IN CLASSIFIED AREAS

	The personnel who can operate in areas classified for the danger of explosion must be trained and informed on the classification of the area in which they operate, on the risks associated with the classification, on the characteristics of the equipment and/or systems that they can use within the classified areas
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### 2.6 OPERATING METHOD IN THE EVENT OF FAILURE

	In the event of any type of failure such as excessive vibrations, anomalous noises, any smell of burning, <b>stop the machine with the appropriate emergency button</b> , contact qualified personnel or the manufacturer.
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## PNEUMATIC WASHING DUST FILTER USE AND MAINTENANCE MANUAL

### 3 HOW YOUR MACHINE IS MADE

#### 3.1 INTENDED USE

The machine has been designed for the suction of dust and aluminum shavings.

#### 3.2 GENERAL DESCRIPTION

The Filter is formed by a metal structure, made up of press-bent galvanized sheet metal panels. Inside the filter there is a filtering battery, of adequate dimensions with respect to the intake air flow. The cleaning of the filtering battery is guaranteed by jets of compressed air which are activated automatically when switched on and stop automatically, after a further cleaning cycle, when the suction system is switched off. The sucked dust will be conveyed into your special container placed under the filter discharge valve.

The maintenance of the filtering battery is carried out through the access doors that can be positioned on the top of the filter or on the side of the filter. These doors are protected against accidental opening by special safety components.

Access to the filter at height is guaranteed by special stairs and landings, always built in compliance with current regulations.

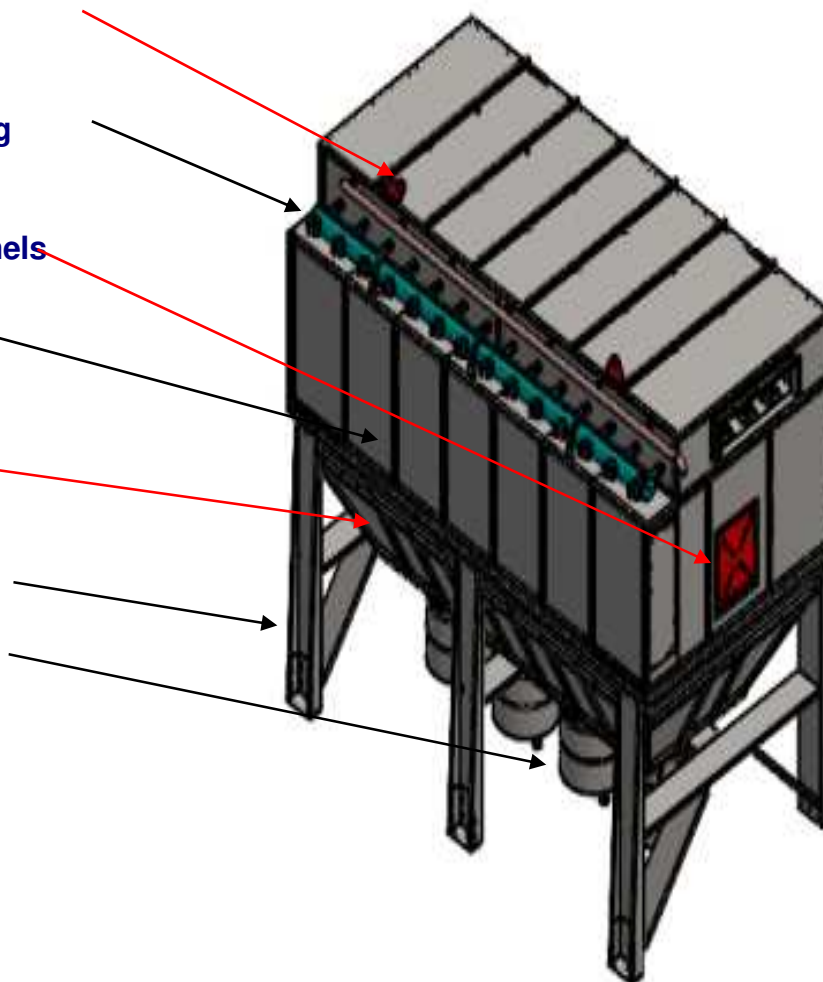
All transit parts and stairs have been adequately protected against accidental falls through the insertion of railings compliant with current regulations.

The entire metal structure is supported by special support legs suitably sized to ensure stability and solidity.



## PNEUMATIC WASHING DUST FILTER USE AND MAINTENANCE MANUAL

- Lifting hooks
- Compressed air lung
- Explosion proof panels
- Room of calm
- Hopper
- Support Legs
- Dust container



### OVERALL DIMENSIONS DEDUSTER FILTER:

- Length mm. 4800
- Depth mm. 2700
- Height mm. 4300

**IMPIANTI ASPIRAZIONE TECNOLOGIE PER L'AMBIENTE**

**CARPENTERIE METALLICHE** VENTILAZIONE-TRASPORTO PNEUMATICO-VENTILATORI  
CENTRIFUGHI ED ELICOIDALI ASPIRAZIONE POLVERI E TRUCIOLO-ASPIRAZIONE GAS SALDATURA  
ASPIRAZIONE FUMI CALDI FILTRI A SECCO-SILO METALLICI CICLONI-ESTRATTORI AUTOMATICI DI  
TRUCIOLO DOSATORI-CALDAIE FUNZIONANTI SCARTI DI LEGNO-GENERATORI ARIA CALDA A  
TRUCIOLO CAMINI METALLICI-CAMINI MECCANICI PER CANNE FUMARIE DEPURATORI FUMI  
CABINE INSONORIZZANTI-CANALIZZAZIONI PER CONDIZIONAMENTO



PROCESSO CERTIFICATO  
EN 1090-1  
Strutture Metalliche



UNI EN  
1090-1 EXC3

## PNEUMATIC WASHING DUST FILTER USE AND MAINTENANCE MANUAL

### 3.3 MACHINE IDENTIFICATION

The machine is identified with the technical data and the CE marking positioned in a clearly visible manner on the outside with a metal plate.



It is **absolutely forbidden** to remove the following plate.

 <b>IMPIANTI ASPIRAZIONE</b>		
MATRICOLA _____	TENSIONE ALIM. _____	
POTENZA INSTALLATA ____ kW	INGOMBRO _____	
ANNO _____	CODICE _____	
PORTATA _____ mc/h	PESO COMPLESSIVO _____ kg	
MODELLO _____	_____	
_____	_____	
UNIAIR s.r.l. Via del Fiume, 1 61030 Sterpeti di Montefelcino (PU) Italy info@uniair.it Tel. +39 0721 743064 www.uniair.it		







It is **absolutely forbidden** to remove any type of security system





## PNEUMATIC WASHING DUST FILTER USE AND MAINTENANCE MANUAL

### 4 INSTALLATION AND SET-UP

#### 4.1 CHECKS / SAFETY STANDARDS

	The parts making up the suction group have not suffered knocks and deformations during transport.
	The installation area must be free from vehicles and unauthorized personnel
	The lifting means to move the various parts of the filter must be suitable for the purpose.
	The support area is structurally sized to support the weight of the machine.








#### 4.2 ELECTRICAL CONNECTION

	The electrical connection must be carried out by technicians in compliance with the requirements established by the law on the matter.
	Before carrying out the electrical connection, check that the characteristics of the distribution line (voltage, frequency) comply with the characteristics of the motors shown on the dataplate of the same.
	Check the presence of the earthing system and its functioning before making the electrical connection
	When making the electrical connection, always follow the rules of good practice dictated by the laws on electrical systems.

## PNEUMATIC WASHING DUST FILTER USE AND MAINTENANCE MANUAL

### 5 PERIODIC MAINTENANCE

#### 5.1 SAFETY STANDARS

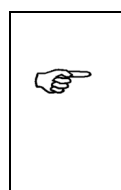
	All maintenance must be carried out with the suction group and the suction system disconnected from the power supply. All parts, especially the fan impeller, must be perfectly still.
	Any type of cleaning and maintenance must be carried out only by qualified personnel who have read and understood all the safety instructions in the manual
	The replacement of any element that makes up the machine must be carried out by qualified personnel and with original spare parts. Failure to comply with this rule will invalidate the guarantee and relieve the supplier from any liability.
	Always comply with the periodic maintenance indicated by the manufacturer.
	Any maintenance on the engine must be carried out according to your own use and maintenance manual delivered together with this manual.
	Any maintenance on the fan must be carried out according to its own use and maintenance manual delivered together with this manual.
	The maintenance operations indicated must be carried out periodically. The intervention times shown in this manual are purely indicative and refer to normal conditions of use (workload, environmental characteristics, nature of the product to be vacuumed), take them into account and, if necessary, carry out the envisaged checks more frequently than those indicated.

## PNEUMATIC WASHING DUST FILTER

### USE AND MAINTENANCE MANUAL

#### 5.2 SCHEDULED MAINTENANCE TABLE

Component	Tasks to be done	Half yearly	Annual
<b>Fan</b>	<ul style="list-style-type: none"> <li>- integral check of the nut</li> <li>- check the state of wear of the impeller</li> <li>- general vibration check</li> <li>- check for the absence of singular noises</li> <li>- check tightness of nuts and bolts</li> <li>- read the use and maintenance manual supplied separately</li> </ul>		<b>X</b>
<b>Motor</b>	<ul style="list-style-type: none"> <li>- check absorption</li> <li>- bearing lubrication check</li> <li>- check for the absence of singular noises</li> <li>- check the tightening of the terminal blocks</li> <li>- check tightness of nuts and bolts</li> <li>- read the use and maintenance manual supplied separately</li> </ul>		<b>X</b>
<b>Dust collector filter</b>	<ul style="list-style-type: none"> <li>- visual check for no damage</li> <li>- structure integrity check</li> <li>- check bolts and nuts tightness</li> </ul>		<b>X</b>
<b>Electrical cabinet</b>	<ul style="list-style-type: none"> <li>- verification of the state of conservation, and cleaning</li> <li>- check functionality of buttons and selectors</li> </ul>		<b>X</b>
<b>Fire damper (if present)</b>	<ul style="list-style-type: none"> <li>- visual check for no damage</li> <li>- verification of the integrity of the structure</li> <li>- check tightness of nuts and bolts</li> </ul>		<b>X</b>
<b>Chimney of ejection</b>	<ul style="list-style-type: none"> <li>- visual check for no damage</li> <li>- structure integrity check</li> <li>- check tightness of nuts and bolts</li> </ul>		<b>X</b>
<b>Suction channels</b>	<ul style="list-style-type: none"> <li>- visual check for no damage</li> <li>- check tightness of nuts and bolts</li> <li>- check and remove materials blocking the air passage</li> </ul>		<b>X</b>
<b>Filter elements</b>	<ul style="list-style-type: none"> <li>- check saturation status</li> <li>- check the integrity of the filter elements</li> <li>- check for the absence of air passage impediments</li> </ul>	<b>X</b>	<b>X</b>
<b>Filter elements</b>	<ul style="list-style-type: none"> <li>- replacement of filter elements <b>if necessary</b></li> </ul>	<b>X</b>	<b>X</b>

	<p style="text-align: center;"><b>ATTENZIONE</b></p> <p>The clogging of the filter elements is due to: both the time of use and the quantity of dust sucked in, and the type of material sucked up and the relative humidity. Therefore, only the end user based on experience can punctually verify the effective filtration capacity of the filtering apparatus.</p>
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