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USE AND MAINTENANCE MANUAL

MACHINE

Name	**DUSTFX 3HP VORTEX CYCLONE DUST COLLECTOR**
Function	**DAMPING OF EMISSIONS IN THE ATMOSPHERE COMING FROM WOOD, PLASTIC, CHIP PROCESSING AND DUST IN GENERAL**
Type	**CWI-DCP350H-VC**
Serial No. Series	
Year of manufacture	**2025**

Number	CWI-DCP350H-VC USER MANUAL
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1. CONTENT AND CONSULTATION METHOD

1.1 INTRODUCTION

Thank you for purchasing an CWI WOODWORKING TECHNOLOGIES product!

CWI is a leader in the supply and development of products and solutions for the sector of environmental technologies.

Our innovative products will filter, clean and recycle in the most demanding work environments. The products and solutions will help you to improve productivity, reduce costs and also the environmental impact of industrial processes.

This manual is an installation guide for use and maintenance of the product. Read it carefully before using the product or carrying out maintenance on it. Replace it immediately if lost.

CWI Woodworking Technologies reserves the right to modify the project and make improvements to the machine without informing clients, and without updating the manual already delivered to the user.

Moreover, in the event of changes to the machine installed on the user site, involving the modification of one or more chapters of the manual, the manufacturer will send to the owners of the manual, the chapters involved/affected by the change, with the new overall revision model of same.

It is the responsibility of the user, following the instructions accompanying the updated documentation, to replace all copies held of the old chapters with the new ones, the cover page and the index with those of the new revision level.

This product is designed to meet the requirements of CE directives. To maintain this status, all installation, maintenance and repair work must be carried out by qualified staff using original spare parts only. Contact your nearest dealer or Alfarimini for advice on technical support and spare parts. In case of damaged or missing components at time of delivery of the product, immediately notify the courier or local Alfarimini dealer.

1.2 Importance of the manual

This manual should be considered an integral part of the machine:

- It must be kept for the entire life of the machine
- It must accompany the machine in the event of transfer
- Other than providing all the useful information to operators, it contains (in specific chapters) the attached documents which can be used for maintenance and repairs.

1.2.1 Scope/purpose of the manual

	This manual is an integral part of the machine and was entirely produced by the manufacturer to provide the necessary information to those who are allowed to interact with it. this manual describes the status of the product at the time of publication itself and in no way will it reflect the future and non-standard product. The content of this manual was checked for its correctness and conformity to the described equipment. However, it is not possible to guarantee the absence of any differences. All the products or registered trademarks listed in this dossier belong to their respective owners.

The User Manual is intended to provide the client with all the necessary information so that, in addition to adequate use of

the machine supplied, the client can manage it in the most autonomous and safe way possible:

- the correct sensitization of the operators to safety problems
- handling the machine, packaged and unpackaged in safe conditions
- the correct installation of the machine
- in-depth knowledge of its operation and limits.
- its correct use in safe conditions
- carry out maintenance, in a correct and safe manner
- dismantling the machine in safe conditions and in compliance with standards in force on workers' health and safety.

	The managers of the company departments, where this machine will be installed, are obliged, according to the standards in force, to carefully read the content of this document and have operators and maintenance personnel read it, in the parts relevant to them. The time this takes will be greatly compensated by correct operation of the machine and by use in safe conditions.

This document assumes that, in environments where the machine will be used, the occupational safety and hygiene standards are observed.

The client is also responsible for ensuring that, if this document is changed by manufacturer, only the updated versions of the manual are actually present in the points of use.

In addition, this manual has been drawn up for the purpose of providing information and warnings to know the machine supplied, to understand its principles and operating limits.
This user manual has been created exclusively for clients of the company Alfarimini S.r.l. and contains confidential information.

1.2.2 General information

Use the machine properly.

Comply with and apply the safety instructions indicated in this manual.

Particular attention must be paid to the content of Chapter No. 12, which highlights the residual risks on the machinery and the requirements to be met by operators.

CWI Woodworking Technologies is responsible for the machine in its original configuration. Any intervention that alters the structure of the machine and its work cycle must be approved and registered in the technical offices of CWI Woodworking Technologies.

CWI Woodworking Technologies is not responsible for damages caused by misuse or incorrect use of the machine and documentation.

CWI Woodworking Technologies is not liable for damages caused by the violation of mandatory rules, negligence, inexperience, imprudence and non-compliance with regulatory rules by the employer, operator or maintenance technician.

CWI Woodworking Technologies is not responsible for the consequences caused by the use of non-original

spare parts. CWI Woodworking Technologies reserves the right to make changes to this manual and the

machine without prior notice.

CWI Woodworking Technologies is available to provide its experience and collaboration for the resolution of any problems that may arise.

Failure to comply with the requirements of this manual will result in the immediate forfeiture of the warranty.

2. Meaning of symbols

Classification of important information

This document contains important information presented as warnings, precautions or notes:

	**WARNING/DANGER!** It indicates the presence of a danger for those who work on the machine and for those who are in the vicinity so the reported activity must be carried out in compliance with current safety regulations and the instructions in this manual. Risk of personal injuries. Warnings indicate a potential hazard to the health and safety of staff and how this hazard can be avoided.
	**CAUTION!** Risk of damage to the equipment Caution indicates a potential danger for the product, but not staff and how this danger can be avoided.
	**NOTE!** Notes contain other important information for staff.

To maintain a high level of safety in use of the VORTEX product, consider the following:

You must install, operate and maintain the unit in accordance with this document and in a secure manner. This document contains important warnings to be respected. Any malfunctions, in particular those which may compromise the safety of the machinery, must be solved immediately.

To ensure the VORTEX product is working properly and to meet all the safety requirements stated in the Declaration of Conformity, the complete system must be assessed in accordance with the applicable safety rules and directives and must comply with all the requirements described in this manual.

• The planner of the final installation must ensure the proper functioning of all products or components and compliance with all safety requirements.

• Access to the unit is restricted to authorised staff only.

	**WARNING!** Risk of personal injuries The scrap material collected for installation of the VORTEX product may be a health risk. For handling, always check the safety requirements for specific waste.

2.1 Warranty

CWI Woodworking Technologies guarantees the machine was tested and verified in its own factory.

The warranty of the machine and its accessories has a duration of 12 months from the delivery date (for particular options, however, what is established in the contract remains valid). This warranty covers the free repair or replacement of those parts which, after careful examination carried out by the manufacturer's technical service, are found to be faulty.

The warranty covers the parts of the machine produced by CWI Woodworking Technologies. For any third party parts installed, (such as units or special devices) the warranty is provided by the manufacturer of such products.

The warranty is limited to material defects only and is no longer valid if the damaged parts of the machine have been tampered with or in any case dismantled by personnel not authorised to do so.

Warranty interventions are carried out exclusively by CWI Woodworking Technologies or in authorised dealers and workshops or at the client's site.

2.2 The warranty does not cover:

- liability for direct and/or indirect damage to people, animals or property caused by a fault or malfunction of the machine
- the transport costs relating to dispatch of the parts to be replaced, the transport, bed and board costs charged according to the tariffs in force for interventions carried out at the user's premises, any customs duties for machines dispatched abroad
- taxes and anything else not written in the supply contract are in any case at the expense of the purchaser
- replacement or repair of materials under warranty does not extend the warranty period.

In addition, the following additional clauses apply:

1. In principle and unless otherwise agreed in writing, the replacement of the parts sent to the user by the vendor must be borne by the purchaser.
2. In general, the warranty is provided with the clause "ex-works manufacturer's headquarters".
3. The manufacturer's warranty is provided independent of the relevant legislation in force in the country of purchase and does not affect or limit in any way the user's rights.
4. At the outset, the user is required to support the manufacturer's attempts to resolve the problem remotely. If the problem cannot be solved remotely, the manufacturer undertakes to collect the defective material with his courier, at his own burden and expense.
5. The manufacturer must, at its sole discretion, repair or replace the faulty parts of the product or product itself, with reconditioned or new parts or units that are functionally equivalent to those originally supplied, within the defined support period for the specific model.
6. If the manufacturer's support center detects the product/defect are not covered by the warranty period/ conditions provided, the service costs will be charged to the client. The manufacturer's support center will send the user a repair estimate that will include fixed service fees (such as shipping and diagnosis costs), labour and the cost of spare parts.
7. Repair of the product will be carried out only after acceptance of the repair estimate by the user who will have to pay the fixed service fee even in case of non-acceptance of the estimate.
8. If the user cannot extend the downtime for the entire period of the repair, the manufacturer is available to send the damaged/defective component in advance to allow the user to continue their work. The component being repaired can be, at the manufacturer's discretion, new or reconditioned. The technical and performance characteristics must be equivalent to those originally provided. The shipment of material for replacement and re-entry of the material not working will take place at the total expense of the user.

The purchaser may assert his rights of warranty only if he has complied with the conditions relating to the performance of the warranty set out in the supply contract.

2.3 Warranty exclusions

On delivery, you must check that the machine has not been damaged during transport. Any claims must be made within 8 days of delivery of the product. The purchaser may assert his rights of warranty only if he has complied with the conditions relating to the performance of the warranty, set out in the supply contract.

In addition to the provision of the supply contract, the warranty is deemed null and void:

- if there is an error of use attributable to the operator, not in accordance with or contrary to the instructions in this user manual
- if the damage to the machine is due to insufficient maintenance
- if the machine is used for uses other than those indicated in this user manual
- where the damage to the machine is attributable to the environmental conditions in which it operates or to phenomena not dependent on normal operation, such as dirty petrol
- If, as a result of repairs performed by the user without the consent of CWI Woodworking Technologies or due to the assembly of non-original spare parts, the machine has undergone changes and the damage is caused by such changes.
- if the instructions in this manual are not followed.

3. General information and technical characteristics

3.1 Tests carried out before delivery

Before delivery, all installed components and the same machine have been subjected to meticulous visual and instrumental inspection (e.g. regarding the equipotential protection circuit), in order to ensure compliance with both the regulatory provisions, and contractual requests.

Accurate compliance with our instructions will ensure your machine, in normal operating and use conditions, will be long-lasting and provide reliable operation.

3.2 Technical characteristics

3.2.1 Scope/purpose of the construction parts

The CWI-DCP350H-VC filter unit model, herein referred to as the "machine", is a mobile system for the reduction of emissions into the atmosphere. It is connected to machines for processing multiple materials and performs the extraction of chips and dust produced by the processing of solid wood, particle board, fibreboard, single plywood or covered with plastic laminates or edging, residue from the processing of plastics, PVC, metals, other compatible materials or similar to those listed here, having the same physical characteristics.

The machine is particularly indicated and designed for extraction and filtration of chips and dust.

The machine is therefore a system for management of waste from the processing of various materials, including a network of ducts, fans, filters, cyclones and storage systems, including a containment system except its exhaust system.

The fan produces the air flow that causes two effects, the extraction of dust inside the system from the machine tools and the transport of this dust and chips, up to the filtration and containment system.

The dust travels through the main duct and the duct networks that connect every single machine used for processing, all the ducts are metal with a circular section.

The machine after starting the extraction system is automatically loaded, that is, the air flow for the transport of dust and chips is always active regardless of the operation or not of the relative machines and transports the processing residue in the storage system.

The machine emptying system is manual, that is, it includes the release, removal, unloading and repositioning of 1

trolley.

The machine is intended exclusively for professional operators and not for consumers.

The machine is a mobile type, that is, it is designed to be placed in different places in which its intended use can be carried out.

⚠	**WARNING!** Before being put into operation in the desired position, the machinery must be locked and unable to move. This requires locking the wheels with the relevant parking brake before it is put into operation. Its use with the machine in motion is not allowed.

VORTEX is designed for the filtering of combustible dust

VORTEX is a complete vacuum unit with direct drive fan with high pressure impeller, all mounted on a steel frame together with the integrated start-up and control unit. VORTEX is switched on directly. The unit avails of two-stage filtering.

4. Parts of the machine

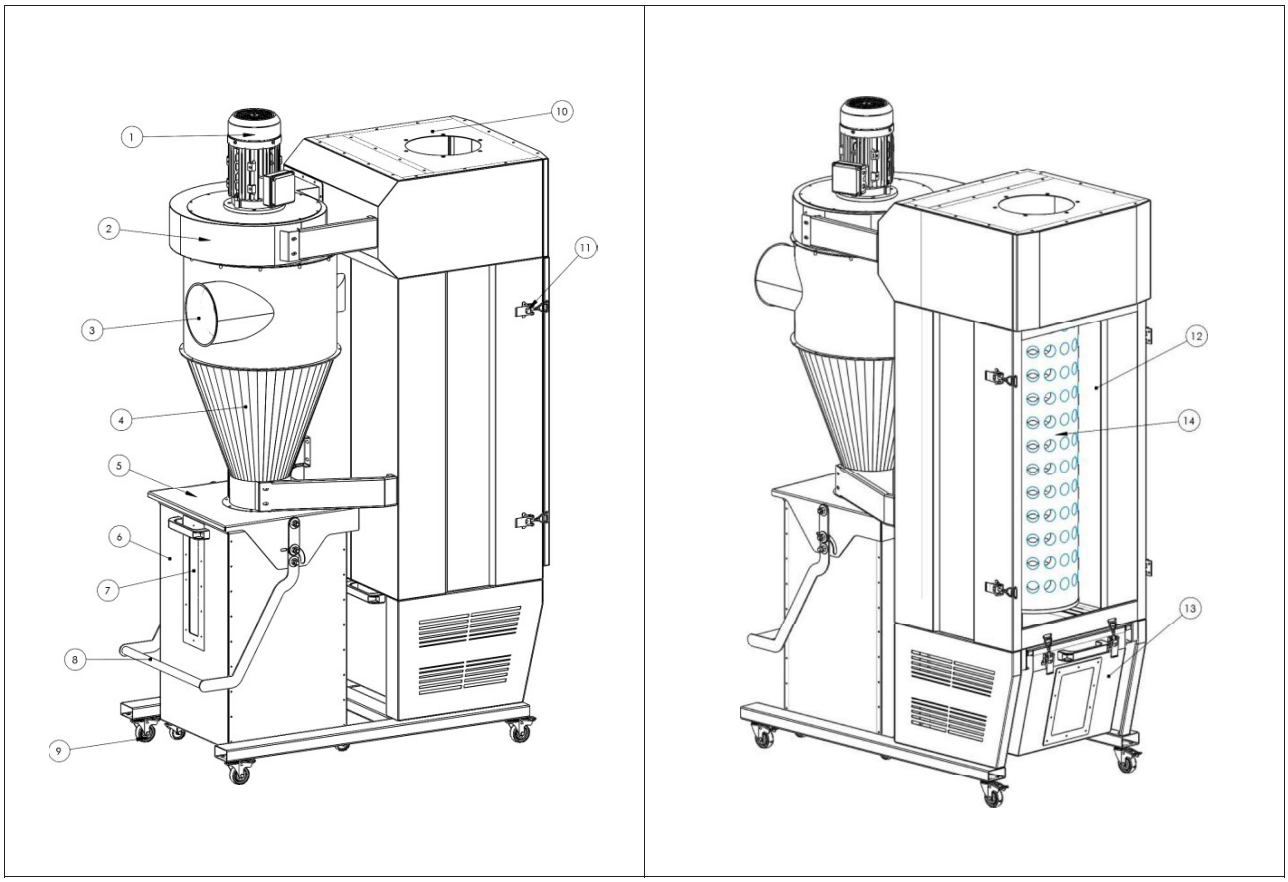


Figure 1

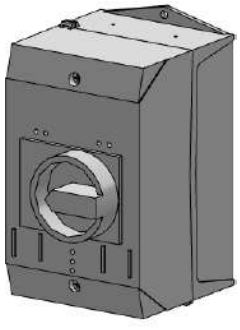
4.1 Main components

Figure 4 illustrates the main components of the CWI-DCP350H-VC:

Ref.	Description
1	Electric motor
2	Case with high pressure fan
3	Dusty air inlet
4	Pre-separation centrifuge cyclone
5	Dust bin cover for chip collection
6	Chip collection bin with plastic bag
7	Inspection window
8	Bin opening lever
9	Wheels with brake
10	Clean air exhausting hole
11	Door
12	Filtering Cartridge
13	Residual dust collection bin

ⓘ	**NOTE!** Never use the filter unit with the door open (ref 11), and/or without the secondary collection bin (ref. 12)! Only use original CWI filter cartridges

4.2 Control switch

	• Start switch • Manual start/stop rotate button. • Release reel

4.3 Working principle

The VORTEX filter unit is a cyclone unit with two-stage filtration.

The first stage of filtration uses the properties of the cyclone, which thanks to the centrifugal force imprinted on the flow, separates the coarser dust particles from the finer ones. The coarse particles are dragged by the force of gravity to the bottom of the cyclone, inside the metal bin.

The finest and most volatile particles, on the other hand, remain in suspension, and are retained by the second filtering stage, the filter bag (or filter cartridge, if any) and then collected in the small plastic bag for collection.

The efficiency of the cyclone depends on several factors: type of dust and chips filtered, their grain size, specific gravity, flow velocity, geometry of the cyclone construction,...

Cyclone separation efficiency can reach filtration efficiency of more than 90%.

5. Performance

As conceived, designed and constructed, the machinery covered by this user manual:

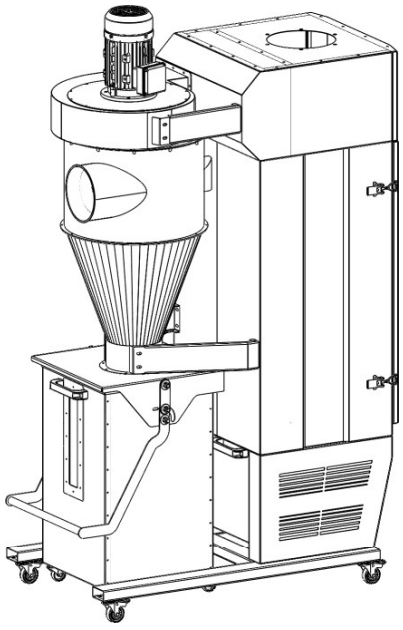
- when used in accordance with the safety requirements of this manual
- when used in accordance with the specific procedures set out in this manual
- regularly maintained and regularly cleaned as specified in this manual

has an expected operating life of 10 years from the first commissioning.

5.1 Dimensions and Weight

The dimensions of the CWI-DCP350H-VC model are outlined in the following table

Width	1.350 mm
Depth	700 mm
Height	2.200 mm
Weight	250 Kg



5.2 Technical data

The main characteristic operating data are as follows:

CWI-DCP350H-VC	
Motor Power	2,2 kW
Voltage	220 v
Frequency	60 Hz
Rated current	6,4 A
Polys	2 - 2.800 rpm
Working flow rate at 2200 Pa - [8,8 inW]	2.000 mc/h (1.180 cfm)
Filtering surface	16 m² (172 sqft)
Filtering tissue	100% POLYESTER SPUNBONDED
Weight tissue	200 gr/m^2
Permeability to air	1200 $m^3/m^2/h$
Filtration efficiency - Class of use	L
Filtering out dust with AGW	> 1 mg/m^3
Max authorised released	< 1,0 %
* Filtering tissue	100% ANTISTATIC POLYESTER SPUNBONDED
* Weight tissue	270 gr/m^2
Permeability to air	670 $m^3/m^2/h$
Filtration efficiency - Class of use	M
Filtering out dust with AGW	≥ 0,1 mg/m^3
Max authorised released	< 0,1 %
* Filtering tissue	100% ANTISTATIC POLYESTER SPUNBONDED - H13
* Weight tissue	270 gr/m^2
Permeability to air	300 $m^3/m^2/h$
Filtration efficiency - Class of use	H 13
Filtering out dust with AGW	Suitable for dusts of dangerous carcinogenic substances and dusts containing pathogens
Max authorised released	< 0,005 %

* Cella filtrante con Carbone Attivo	Vergine 205E - (CTC 45%)
* Cell dimension	450 x 450 x 100 mm
* Quantity	15 Kg
Ambient temperature	-10 - +40 °C (14 - 104 °F)
Process air temperature	0 - 60 °C (32–102 °F)
Extraction opening	Ø 200 mm (7.8 in)
Volume, collection container - Front	150 litres (45 gal)
Volume, collection container - Rear	80 litres - (22 gal)
Weight	250 KG
Dimensions	1350 x 700 x 2,200 mm
Recycling of construction material	Approx. 98 % for weight
Noise	< 70 dB(A)
*** the items marked with the symbol * are optional**	

6. Products processed - Handled or generated

The machine in this manual was designed and constructed for extraction of chips and dust produced by the processing of solid wood, particle board, fibreboard, single plywood or covered with plastic laminates or edging, residue from the processing of plastics, PVC, metals, other compatible materials or similar to those listed here, having the same physical characteristics.

As the machine is equipped with **Cartridge Dust Filter**, it particularly suitable and designed for the extraction and filtration of very fine micrometric dust.

7. Aerial noise emission

The conditions of the machinery during measurement and the measuring methods used must be described.

INFORMATION ON AERIAL NOISE EMISSION	**CHARACTERISTICS**
Acoustic pressure level of weighted emission A in the workplace	
Near the front zone on the machine	70 dB(A) ± 1 dB(A) of uncertainty
Maximum value of C-weighted instantaneous sound pressure at workstations if it exceeds 63 Pa (130 dB compared to 20 µPa),	
Near the front zone on the machine	70 dB(A) ± 1 dB(A) of uncertainty

A-weighted sound power level emitted by the machine, if the sound pressure level of the A-weighted emission at the workstations exceeds 80 dB(A).	
Near the front zone on the machine	68 dB(A) ± 1 dB(A) of uncertainty

	**NOTE!** These aforementioned values are those established on the basis of measurements taken for technically comparable machinery which is representative of the machinery to be produced. The acoustic data must be measured using the methodologies defined in the harmonized standards and the most appropriate measuring code appropriate to the machine. The A-weighted sound pressure levels shall be measured 1 m from the machine surface and 1.60 m off the ground.

8. Use limitations

8.1 Service conditions

SERVICE CONDITIONS	LIMITS FOR THE USER
Installation method	Inside (outside if painted with suitable outdoor paint in a protected area and away from bad weather)
Conditions of the supporting ground	**Horizontal and smooth:** flatness errors and slope contained within **2% gradient**
Support surface characteristics	Reinforced concrete flooring or flooring in accordance with the health and safety provisions of the workplace in accordance with legislation applicable therein
Bearing capacity of the supporting ground	**Minimum 1,500 kg / m²**
Minimum spaces compared to surrounding machine:	During functioning: ▭ **width =** 1000 mm + width of machine + any width of opening movable guards; ▭ **length =** 1000 mm + 1000 mm + width of machine + any width of opening movable guards. During equipping, maintenance or adjustment: ▭ **width** = 2000 mm + width of machine + any width of opening movable guards; ▭ l**ength** =2000 mm + 1000 mm + width of machine + any width of opening movable guards.
Maximum environmental air temperature	+60°C
Minimum environmental air temperature	5°C (if the electrical equipment has a degree of protection at least IP54) 0°C (if the electrical equipment has a degree of protection under IP54)
Environmental working temperature	+5 °C < T < +60 °C
Transport and Storage temperature	between -25°C and +65°C (for periods under 24 h, it is possible to have temperatures up to +70°C)
Maximum altitudes above sea level	1,500 m
Minimum lighting required	500 lux
Relative humidity of 100% at temperature of 25°C (if the electrical equipment has a degree of protection at least IP54)	
Relative humidity must not exceed 50% at a temperature of +40°C or 90% at a temperature of +20°C (if the electrical equipment has a degree of protection under IP54)	
Equipping for machine with indoor installations	
Machine **inadequate** for operation in environments where contaminating agents are present: for example dust, acid, gas, corrosives, salt and similar	
Machine **inadequate** for operation in environments where potentially explosive atmospheres are present classified as zone 0 or zone 1 or zone 2.	
Machine **inadequate** for use in environments where ionising and non-ionising radiation is present: for example, microwaves, ultraviolet rays, lasers, X-rays and similar	

Electrical equipment **inadequate** to be equipped with machines or to operate in environments where there are vibrations and shocks: otherwise mount it away from the equipment provide anti-vibration supports	
Degrees of pollution for electrical equipment equal at 3 (THREE)	
Installation environment equal to two (2)	
Can be used in residential, commercial or light industry environments as it complies with EN 61000-6-1	
Intended for direct/exclusive service of industrial process machinery	
Special and additional requirements, not provided for, may be required of the machinery provided for:	☐ use in the open air ☐ the treatment of potentially explosive material ☐ use in potentially explosive and/or flammable atmospheres ☐ use with specific risks in the processing of specified materials ☐ use in mines ☐ use in cooling systems ☐ use at high temperature ☐ use in corrosive environments ☐ use in strong magnetic fields ☐ use in radioactive conditions ☐ use for loads whose nature could lead to a risky situation (for example, molten metal, acids/bases, particularly fragile loads, explosives) ☐ use on ships and the effect of earthquakes ☐ use in contact with foodstuffs ☐ use in public areas ☐ use of ground support of aircraft.

9. Normal use, misuse, forbidden use and reasonably foreseeable misuse

The machinery described in this manual is intended to be used by 1 operator who is trained and aware of the residual risks, but who is competent in matters of safety, of maintenance staff and having professionalism as indicated in the relevant chapter of this manual.

⚠	**WARNING!** This manual lists and describes the residual risks which could not be eliminated by design and which remain on the machine. For each hazard, instructions or provisions will be given to the user to avoid hazards to the operator and to those responsible for maintenance. For safety reasons, the presence of people other than the operator is not allowed during the machining operations in the surrounding area.

	**NOTE!** In NORMAL USE, it is reasonably foreseeable that the machine can only be used: to process products, according to the working logic defined in the following manual. The use of the machine to carry out processes other than those indicated in this manual is considered misuse and is therefore strictly forbidden with use of products (and materials) described and having dimensions described in this manual. It is also compulsory: to check all the safety devices are perfectly intact before starting to operate the machine to wear gloves for manual adjustments on parts in metal and to handle the tools used on the machine before starting the machine, to check the lighting conditions of the environment, which must not have shady areas, dazzling lights or dangerous strobe effects. in the event of serious danger, promptly press the emergency stop button on the electric boxes before carrying out any intervention, disconnect and segregate the sources of general electrical, hydraulic and pneumatic energy and safely discharge the residual energy in the circuits and wait for cooling of the hot parts.

	**WARNING!** The machine must not be MISUSED, in particular: it cannot be operated with parameters other than those given in the table of technical characteristics (cf. paragraph 2.2.6.) and with products and/ or materials having characteristics other than those indicated above (cf. paragraph 5.2.) any use of the machine other than those indicated in this manual, is to be considered misuse and therefore the manufacturer declines all liability the user shall be liable for damages resulting from failure to observe the operating conditions agreed upon in the technical specification and in the order confirmation.

Machinery must not be used IN A FORBIDDEN AND IMPROPER MANNER WHICH IS REASONABLY FORESEEABLE; in particular:

1. extraction is forbidden of different materials to those described in this manual.
2. it is forbidden to extract gas or explosive substances
3. it is forbidden to leave the machine unguarded when running
4. it is forbidden, when stopping the machine due to the absence of electrical power supply, for the operator to access the work zone of the machine by attempting to climb on and/or open the guards, but activate the internal maintenance service
5. it is forbidden to use flammable, corrosive or harmful substances for cleaning
6. it is forbidden for unauthorized staff to use the machine and when dressed differently to use instructions

7. it is forbidden to use equipment with open flames and handle incandescent material, unless suitable safety measures are in place
8. it is forbidden to activate or adjust the control and locking devices such as knobs or similar both during operation of the machine and if not authorised
9. it is forbidden to hang objects or weights on the machine
10. use is forbidden with the safety guards open, not fastened correctly or removed
11. use is forbidden with the safety micro-switches and the interlocks disabled and, in general, with any safety and/ or protection devices (mechanical/electrical) disabled and/or not
12. it is forbidden to partially or totally neutralize, remove, modify or make inefficient the guards, the safety micro-switches and the danger signs
13. use is forbidden without all the measures implemented by the user regarding elimination of the residual risks indicated in these instructions for use
14. use is forbidden in operations different to those explicitly indicated in these instructions for use
15. use is forbidden in environments where operation is planned without appropriate safety measures
16. it is forbidden to allow untrained staff use the machine
17. it is forbidden to put the machine in contact with foodstuffs
18. it is forbidden to activate the control devices to move the machine without ensuring in advance that nobody is present in the danger zones
19. it is forbidden for the operator and the maintenance technician to access the danger zones for cleaning, lubrication, maintenance operations, etc. without having placed the sectioning device knobs to "ZERO" and locked them with a lock
20. it is forbidden to use the machine in unstable conditions, i.e.:

- positioned on non-horizontal or uneven ground or ground with an inadequate bearing capacity according to the provisions of this manual
- outdoors or on building sites without doors and windows

21. it is forbidden to obstruct ventilation or dissipation of heat openings
22. it is forbidden to touch the machine with bare hands or with wet or damp feet
23. it is forbidden to use high pressure water jets for cleaning.

	**NOTE!** The manufacturer cannot be considered responsible for any faults caused by unreasonable use, misuse and/or wrong use. The user is however responsible for damages resulting from non-compliance with the specified use conditions. If in doubt, contact the technical office of CWI Woodworking Technologies. The client is however always responsible for the supply of personal protective equipment for operators and provision of information to users on permitted use.

10. Subject of the supply

10.1 Identification of the machine

The identification plate of the machine is positioned on the frame near the control panel and outlines the following data: [facsimile]

Machine type	FILTER UNIT WITH CYCLONE FOR DUST AND CHIPS
Model	CWI-DCP350H-VC
Serial number	
Year	
Motor power	
Voltage	
Filter surface	
Filter bag	
Maximum capacity	
Maximum pressure	
Weight	

CWI Woodworking Technologies
1967 St. Matthews Ave
Winnipeg, MB R3H 0J1 Canada
204.786.3196 Ext. 5
cwimachinery.com – sales@cwimachinery.com

11. Certification of the machine

Directive 2006/42/EC states the minimum conditions with which a machine can be released on the market of the European Union.

That Directive requires all machinery must be placed on the market and put into service only if it does not affect the safety and health of persons, domestic animals or property.

The machine covered by this manual is a machine which is not covered by one of the categories of machinery outlined in the list covered in Annex IV of the Directive. To certify conformity of the machine with the provisions of the Machinery Directive, before being placed on the market, CWI Woodworking Technologies carried out all the tests and verifications required by the reference standards, including risk analysis to verify timely compliance with the essential health and safety requirements of the Directive. The construction technical file collects the fundamental data of the design and all the characteristics relating to safety of machinery was drafted in compliance with the provisions of Annex VII-A of the Directive 2006/42/EC, it is archived in our offices and can be made available for possible controls by regulatory bodies, on justified request, as outlined by the legal provisions in force on the matter.

The manufacturer, having checked through the aforementioned analyses that the machine was designed and manufactured in compliance with the provisions of Directive 2006/42/EC, having met the provisions, and that it can be used safely in the operating conditions planned in this manual, will release the machine on the market equipping and accompanying the machine with the:

CE marking

CE Declaration of Conformity

Instructions for user manual (User Manual).

Edition 1.2 - June 2024

EC DECLARATION OF CONFORMITY

The undersigned, representative of the following manufacturer

Manufacturer	CWI Woodworking Technologies
Address	1967 St. Matthews Avenue, Winnipeg, MB R3H 0J1 Canada

has appointed the person authorised to compose and preserve the technical file

Name	Antonino Amato
Address	Via Luciano Lama,14 47924 Rimini (RN) ITALY

The manufacturer hereby declares below that the machine

General / commercial name	**FILTER UNIT FOR DUST AND CHIPS**
Function	**DAMPING OF EMISSIONS IN THE ATMOSPHERE COMING FROM WOOD, PVC, METAL AND SIMILAR PROCESSING**
Type	**CWI-DCP350H-VC**
Serial number	
Year of manufacture	

results as compliant with all the relevant provisions outlined by the following European directives (including all the applicable amendments)

2006/42/EC - Machinery Directive
2014/30/EC - Electromagnetic Compatibility Directive and subsequents modification
2014/35/EC - Low Voltage Directive and subsequents modification

Rimini (Italy),.....(date).

..... (signature)

ANTONINO AMATO – Sole Director

FACSIMILE OF ORIGINAL

12. Safety Instructions

Always comply with safety regulations.

Failure to comply with safety rules and procedures can cause danger and damage to staff and machinery.

The general safety instructions in this user manual are of a general nature and, although they are based on experience, they do not cover all situations that may occur.
These instructions complement and do not replace the constant application by the client of the machine of the basic safety rules known to those who work in the specific field.
It is therefore recommended to respect the safety and prevention rules already used in the places where the machine will be used.

Chapter 12.1 the **residual risks** present **on the machine** are highlighted despite the correct application of the design and safety rules; the methods to be applied by the client to reduce and/or eliminate the residual risks highlighted are also indicated.

The machine supplied by us is restricted in use (operation and maintenance) by you and/or the end user to:

- all the rules, of insertion into the environment and of the behaviour of people, established by the applicable laws and/or standards; with particular reference to the fixed machine upstream of the supplied machine and for its connection/operation
- all additional instructions and warnings for use as part of the technical/graphic documentation attached to the machine.

12.1 Indication of residual risks present

WARNING!
This manual lists and describes the residual risks which could not be eliminated by design and which remain on the machine.
For each hazard, instructions or provisions will be given to the user to avoid hazards to the operator and to those responsible for maintenance.

After considering the possible risks relating to use and maintenance of the machine, all the necessary solutions have been implemented to eliminate the risks and limit the dangers to exposed people. However, the following residual risks remain on the machine which can be eliminated or reduced with the indicated precautions.

The employer, in compliance with Directive 89/391/EEC and subsequent amendments and updates thereto, concerning the implementation of measures to promote improvements in the workers' occupational health and safety, must ensure that the residual risks indicated in this manual are eliminated or reduced.
The employer must instruct staff on the risks of accidents, on safety devices and on the general rules on safety laid down by Community directives and the legislation of the country where the machinery is installed.

It is the employer's responsibility to instruct operators and maintenance staff by undertaking a training course, possibly in cooperation with the machine manufacturer, in such a way that they are properly informed of the risks in general and the residual risks indicated in this manual.

It is therefore necessary that the use, maintenance carried out by the user and cleaning, are entrusted to trained and competent staff.

It is the employer's responsibility to ensure that the instructions given have been properly implemented.

For safety reasons, the presence of people other than the operator is not allowed during the processing operations in the surrounding area. Notwithstanding this requirement, maintenance staff expressly authorised by the production manager may be present.

12.1.2 Machine use

NOTE!
The machine must be used exclusively for the purpose to which it is expressly dedicated, as specified in this manual.

Use of the machine should be restricted to staff who have followed a specific course on use and safety and must have carefully read this instruction manual.

In addition to being properly informed and trained and operating with caution and paying attention to the warnings given on the machine, the operator must always pay close attention during normal use and comply with the intended use.

12.1.3 Residual risk due to the flammability of the material processed

WARNING!
To avoid, dangers resulting from fire:
1. of the substances used on the machine
2. However against residual risk due to development of a fire

the employer must, in addition to adequately training and informing the operator and the maintenance technician, in the vicinity of the machine control station, provide suitable, permanent fire-fighting systems, appropriate for the type of materials which may ignite.

12.1.4 Residual risk due to lifting operations of the machine and operations which require manual operation

WARNING!
Lifting and transporting of the machine or parts thereof, equipping or handling, loading/unloading of products and handling of parts in general, although carried out in compliance with the provisions of this manual, are manual operations involving a residual risk due mainly to impact, crushing, dragging, rubbing or abrasion.
These operations require a considerable degree of care by operators; the operations manager must adequately inform staff of these residual risks.

There is also a residual risk of impact, abrasion, cutting, puncture and rubbing, during setup, maintenance, cleaning and other manual operations involving the possible fall of parts or components.

Therefore, both the operator and the maintenance technician in addition to being adequately informed and trained, whenever they perform manual operations, in addition to respecting the intended modes of use, must use foot protection devices and clothing appropriate to the workplace, such as: cut-resistant gloves, slip-resistant footwear, resistant to the particular nature of the risk, with an iron tip.

12.1.5 Residual risk due to the danger of electrocution

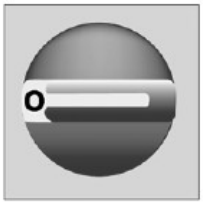
 	**WARNING!** there is a residual risk for the maintenance technician on the electrical equipment, if it is necessary to intervene inside electrical panels, junction boxes and electrical components, in the presence of voltage, to carry out verification operations, maintenance and operation tests, which require the intervention with the electrical equipment live and/ or removal of the guards. Therefore, maintenance technicians must work with caution and comply with the instructions on the labels affixed near these components. Furthermore, intervention including access inside these zones must be carried out by specialist and authorised "electrical maintenance technicians", who must also strictly comply with all the safety standards on electrical system design. It is important to point out that it is not enough for staff working on such interventions to be trained only on aspects relating to electrical risk, but: they must have in-depth knowledge of all the safety issues relating to the machines on which they operate be expressly authorised by the employer to perform interventions on electrical equipment when live. With regard to the rules for electrical works with voltage off, under-voltage and near-electric works (by way of example): CEI 11-27 - Work on electrical systems CEI EN 50110 parts 1 and 2- Operation of electrical systems.

12.1.5 Sectioning device of the electrical power supply

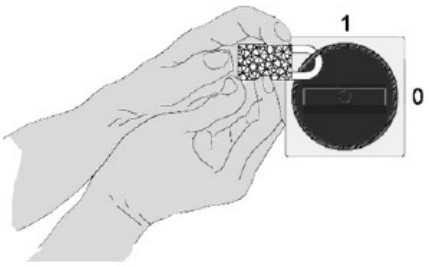
In order to make it possible to carry out work without the risk of electric shocks or burns, a cut-off device has been provided for the electrical equipment.
The power supply sectioning device, as described in the diagram of the power circuits delivered with the electrical equipment, is provided for the only power source of the machine.
In case of incompatibility between the mains socket and the plug of the equipment, have the socket replaced with another suitable type by maintenance staff.
The power supply sectioning device allows you to separate (isolate) the electrical equipment of the machine from the power supply, in order to make it possible to carry out interventions without risk of electric shock.

The sectioning device has two possible positions:

O or "disconnected" electrical equipment **sectioned** from electrical power supply (bar low)



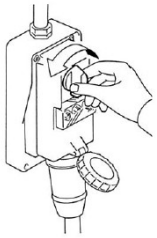
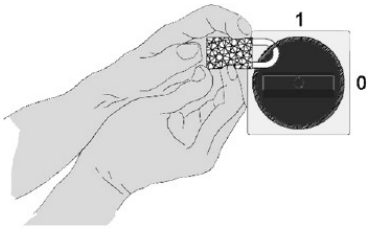
1 or "connected" electrical equipment **live** (bar raised)



During **maintenance, cleaning and replacement of parts**, the machine must not be used and no command must be given.

Before performing any maintenance, lubrication, cleaning and replacement of parts, etc..., external power sources must be disconnected.

All sectioning devices must also be locked in the zero position with padlocks.

1	2	3
 Position on "0" the safety **device placed upstream of the power line**	 Position on "0" **the E.B. sectioning device.**	 **Lock the handle in position "0" with lock supplied**

12.1.6 Residual risk due to noise

⚠ ⓘ	**WARNING!** The machine produces, as per testing carried out, a level of weighted A equivalent continuous acoustic pressure (cf. chapter 2). To avoid the danger of injury to ears by lacerating or persistent noise, the operator and the maintenance technician, in addition to being adequately informed and trained, during operation of the machine and maintenance, must always use appropriate ear protective equipment, such as, for example, earmuffs or protective plugs or similar personal ear protection.

	**WARNING!** Risk of personal injuries • Always use protective equipment and appropriate lifting. • Consider the center of gravity and the accessories during transport to avoid overturning

	**NOTE!** • Always comply with legislation and standards in force in your country in all installation, movement, maintenance phase sand any use phase of the machine

13. Before installation

13.1 Controls on receipt

It is important to perform a thorough check when the packages arrive, instantly on receipt. The check is carried out in two phases per package to avoid possible misunderstanding with the carrier.

Administrative feedback

1. no. of crates and number of packages
2. weight and size
3. correspondence of information on transport document with what is delivered (description, serial numbers, etc. The technical data outlined on the identification plate of the machine correspond to those in the technical documentation delivered)
4. Transport document data corresponding to order made.

Technical feedback

- condition and intactness of packaging
- packaging with no visible damage, in transport and movement operations.

All these checks must be carried out visually, with the carrier's delivery staff present. In the event of damage or incomplete or wrong supply, directly notify the manufacturer's sales office.

	**NOTE!** **In relation to the description above, the manufacturer reminds the user** for international and national recurrent regulations, the goods always travel at the risk and danger of the latter and, unless otherwise undersigned in the order confirmation, the goods travel uninsured.

13.2 Transport, lifting and movement - general regulations

1. Movement of the unpacked machine is mandatory only in covered areas/sites.
2. Ensure the safety workload of the lifting equipment is greater than the weight of the machine to be lifted and its overall dimensions.
3. Lifting equipment must be the type approved and regularly maintained in accordance with the laws and regulations in force.
4. Take all necessary measures to ensure maximum stability of loads in relation to their weights and centre of gravity, as indicated by the manufacturer on the machine.
5. Before lifting a load, make sure that it is properly tied and balanced in the lifting device.
6. Precautions must be taken to prevent dangerous overloads due to acceleration, deceleration or impact forces.
7. If the load does not allow sufficient visibility of the soil, request the presence of a second person on the ground.
8. Movement must be carried out with continuous movements, without tearing or repeated jolts.
9. When moving the machine, keep the load at the minimum possible height off the ground to overcome any obstacles; this is for better stability of the load itself and for greater visibility.
10. All parts, if any, or units and sub-units, which may be affected by movement during handling (parts within the crate), must be firmly secured (by means of sealing systems) and avoiding dangerous movements that could compromise the stability and balance of the load with possible overturning of same, accidental falls of parts or possible overturning, even partial, of the device used for movement.
11. For the purpose of stability, in order to avoid mechanical stress during lifting, movement and transport, the electric boxes and the various elements delivered separately, whatever their shape and morphology, must remain upright.
12. In addition, all the safety requirements set out in this manual must be met.

	**NOTE!** All connected tubing must be conductive and connected to the ground.

	**WARNING!** Risk of explosion. Do not extract materials that could cause fire or clogging. It is strictly forbidden to extract materials that can cause chemical or thermal reactions and/or auto-combustion.

14. Recommendations

14.1 Extraction speed

It is important to use extraction pipes with a suitable diameter to avoid pressure drops and dust deposits inside them. Make sure you get a correct transport speed.

The speed depends on the properties of the transported material. Some applications may require speeds up to 28 m/s. When choosing the diameter of the pipes take into account the speed. The speed must never decrease in the path towards the unit. The transport speed in the tubes may vary depending on the time of use of the negative pressure system.

15. Installation and adjustment

For correct installation of the unit, it must be installed in a sheltered place adequately protected from bad weather. Some parts of the machine (motor, filter bag, structure in steel) are not manufactured for outdoor locations, in contact with rain, wind or humidity.

Installing the VORTEX unit, consider the following:

- The foundation must be solid **with a horizontal flat surface (installation is not permitted on sloped ground).**
- Do not install VORTEX near sources of heat and hot surfaces.
- Ensures movement is comfortable.
- Ensure removal of the collected dust is comfortable.
- Ensure the support and maintenance can be carried out conveniently.
- In the event of high relative humidity, do not expose VORTEX to sub-zero temperatures.
- Do not position VORTEX in direct sunlight.

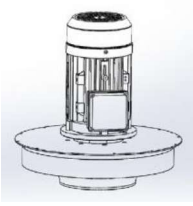
15.1 Assembly

Upon request, the CWI-DCP350H-VC filter unit can be supplied completely disassembled, inside a cardboard box or almost completely assembled, positioned on a pallet.

If it is supplied completely disassembled, proceed to its assembly according to the assembly diagram that you will find attached to the machine. The average assembly time could be about 6 hours.

If the machine is supplied assembled, these are the simple steps to complete the assembly:

1. Mount the motor/fan assembly on the vacuum cleaner body and tighten the 8 screws;

	weight 30 kg approx.

2. Connect the motor electrical cable to the circuit breaker (electrical operations must be done by electrician and experienced staff);
3. Insert one of the plastic bags inside the metal bin. The bag must be folded for a few cm at the edge of the bin;

	
4	5

4. At this point, you can insert the bin in the machine and lock it, lowering the lever;
5. At the rear of the machine, insert the small metal bin into the guides, push to the bottom and lock the two levers - (Fig. 6 - 7)

6

6

15.2 Positioning inside

Ensure that the installation environment of the unit is well ventilated.
In some cases, the unit draws the air towards it, which enters directly into the fan at high pressure and, if air circulation is not guaranteed, there is a danger of negative pressure in the room. Two ventilation openings of at least 250 x 250 mm are required. One must be high, the other low.

ⓘ	**NOTE!** Never place in a small room with the VORTEX unit installed inside it without a proper window or filtered air vent.

15.3 Electrical connections

Electrical cables and plugs are not provided and are therefore at the user's expense.

Connection of the power supply must be in accordance with the relevant legislation of the country in which it is used.

- The power supply must therefore be maintained in accordance with the following technical requirements:
- the power supply of the electrical panel must always be the type and intensity corresponding to the specifications in the wiring diagram. If excessive voltages are applied, components will be damaged beyond repair
- the power supply to the electric box, taking into account that the electric box is seen as electrical equipment or a component to the power supply, a protective device coordinated with the protection circuit must be provided as part of the protection against indirect contacts due to automatic power failure, respecting the legislation and regulations in force in the country of installation
- the cable for the power supply of the electric box inside the casing of the machine must be passed through the spaces provided by us and properly marked with the graphic sign No. 5036 of IEC 60417-2, all conforming with the graphic sign B 3.6 of ISO 3864
- the cable for the power supply of the electric box outside the casing of the machine must be passed through the spaces you have set up, adequately protected and adequately marked with the graphic sign No. 5036 of IEC 60417-2, all conforming to ISO 3864 graphic sign B 3.6

IEC 60417-2 graphic sign No. 503615.4

- the control cabinet power supply cable must have a section and have characteristics corresponding to the specifications on the first page of the power circuit diagram and those indicated in Chapter 2. Cables of different cross-section can change the short-circuit current values and thus compromise protection of same in case of short-circuit
- the material used for the power supply conductors must be copper
- the cable to supply the electric box from the over-current protection device to the connection point of the supplied electric box must be in one size, without intermediate interruptions.
- continuity must be guaranteed (connected and available) of the neutral conductor (N) before powering the electrical equipment
- Before powering the equipment, the continuity of the yellow-green conductor (connected and available) of the equipotential protection circuit must be guaranteed.

Connect the power cable of the electric box:

L1 → R L2 → S L3 → T PE → yellow green

For recommended minimum sections of conductors from the external power source, refer to the power circuit diagram.

	**WARNING!** Risk of personal injuries Works on the electrical system must be carried out by qualified staff.

	**NOTE!** Comply with the national and local standards relating to electrical systems.

15.4 General requirements

The following items represent the minimum requirements to ensure proper operation and the required level of protection relating to the category of equipment, directives and EC regulations listed in 'Directives':

• Take appropriate measures to avoid all types of stray currents to and/or from the ducts system and electrical wiring.

• Check that the input voltage and frequency are correct.

• In case of outdoor installation, the unit must be equipped with a lightning arrester. The lightning conductor must comply with the applicable national and local rules.

15.5 Ground control measurement

Check the unit is properly grounded both after installation and after normal maintenance. Verify the connection to the ground in case a component is dismantled and then reassembled.

16. Using VORTEX

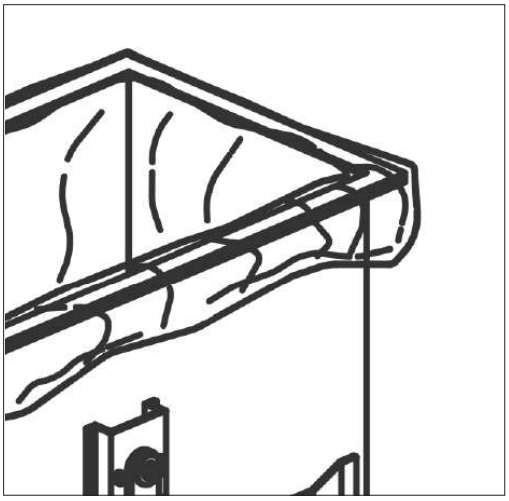
⚠	**WARNING!** Risk of personal injuries • The unit creates strong negative pressure. • Use protective equipment for hearing.

16.1 Before start-up

The unit is tested before dispatch and all the functions are checked.

Before start-up, ensure:

- The switch for maintenance is installed and positioned on 0/OFF.
- The plastic bag inside the metal bin is folded outwards by a few cm. on the entire perimeter of the bin



- The collection bin is correctly fastened and the handle is lowered
- The installation room, if small, is equipped with ventilation openings;
- The filter bag (or cartridge/optional) is correctly installed and locked with the relevant clamp;
- The plastic collection bag is blocked with the relevant clamp.

ⓘ	**NOTE!** Never use the unit without the outer plastic bag! never use the machine without the filter bag (or cartridge/optional) Never turn on the machine with the metal bin unlocked

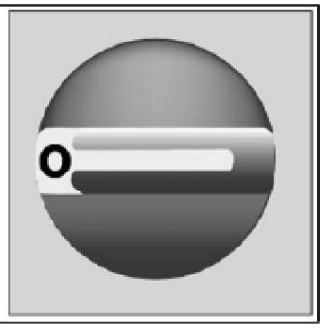
• The tubes are connected to the dust manifold inlet.

16.2 First start-up

1. Lock the machine using the brakes of the wheels
2. Check the filter bag is properly installed and the filter sleeve is securely locked

3. Check the external plastic collecting bag is correctly installed and that its clamp is securely locked
4. Check the plastic bag inside the metal bin is inserted correctly and the top is turned outwards
5. Check the metal bin is properly attached to the top cover with the lever fully lowered
6. Check the rotation direction of the motor complies with the direction of the red arrow applied to the motor

If the rotation direction is wrong, follow these steps:
- Stop the unit by turning the switch to position 0 (off)

0 or "disengaged" electrical equipment **sectioned** by the electrical power supply (horizontal knob).	

- Detach the electrical power supply plug from the socket.
- Lock the on/off button in maintenance position.
- Open the control panel
- Invert two of the input phase conductors
- Reposition the cover of the start and command unit

17. Routine maintenance

⚠	**WARNING!** Risk of personal injuries • Use suitable protective devices if you risk exposure to dust. • Electrical works must be carried out by a qualified electrician. • Always disconnect the supply voltage via the maintenance switch before performing any mechanical or electrical service. Always lock the maintenance switches in position "off" (off). • Make sure the system is not depressed during support.

17.1 Actions that can be performed by operators

Below are all the periodic checks/verifications, adjustment and registration interventions and ROUTINE MAINTENANCE interventions that can also be carried out by the machine operator.

FREQUENCY	CHECK	METHOD AND FINDINGS
Before each work shift	**Work area control:** • it must be clean and free of dust	The workstation and all the external parts of the machinery must be clean and must be cleaned of dust or objects which could impede their proper functioning and which could compromise the safety conditions originally present in the machinery. Remove all impurities from the machine with a compressed air jet or vacuum cleaner and preferably rags that do not leave filament. For any type of intervention or replacement of parts, activate the maintenance service.
Before each work shift	**Check functionality:** • of the emergency stop device • of the parts of the command/ control system relating to safety • of the light signaling devices • of the safety devices • of the stop functions relating to safety.	All devices and circuits indicated must perform their intended function. **Directly command the devices to ensure they perform the intended function** (e.g. stoppage, etc..). **When the first problem arises,** you must implement the control procedure that checks the electrical and mechanical devices are working perfectly. The actuators and all the parts must however be replaced on first signs of erosion or breakage. For any type of intervention or replacement of parts, activate the maintenance service. Possible replacement must take place with the manufacturer's original products or at least the equivalent quality and safety.
Before each work shift	**Visual inspection of intactness:** • of the fixed guards.	All the fixed guards must perform their intended function. Check their intactness, both on the inner and outer part of their surface and the absence of signs of erosion or breakage. For any type of intervention or replacement of parts, activate the maintenance service.
Before each work shift	**Visual inspection and functionality:** • absence of leaks/breakages in the pneumatic circuit.	Ensure the absence of breakages/leaks in the tubing or the components of the systems. **When the first problem arises,** you must implement the control procedure that checks perfect mechanical functionality, if necessary activating the maintenance service. All the parts must however be replaced on first signs of erosion or breakage. For any type of intervention or replacement of parts, activate the maintenance service.
At least once a week	**Visual inspection of intactness:** • all plates.	In the event they are illegible, or requested to the manufacturer or however replaced by the user with others reporting identical information, according to chapter 4.

Possible replacement must take place with the manufacturer's original products or at least the equivalent quality and safety.

The instructions for replacement do not appear in this manual and must therefore be explicitly requested from the manufacturer of the machine, who reserves the responsibility for replacement work.

17.2 Actions that can be performed by maintenance technicians

The following are the interventions for ROUTINE MAINTENANCE, which must be carried out by maintenance technicians as defined in this chapter.

The instructions for replacement do not appear in this manual and must therefore be explicitly requested from the manufacturer of the machine, who reserves the responsibility for replacement work.

FREQUENCY	CHECK	METHODS AND VALIDATION
At least monthly	**efficiency check** • of mechanical connections	Carry out, with the appropriate tools, control of the tightening of the clamps, screws, nuts, bolts and connections in general of both the parts of the equipment and the machine.
At least quarterly	**Replacement of the filter cartridges**	Use dust-proof masks to carry out the following operations. When the wear status of the filter cartridges requires replacement, do as follows: 1. Isolate the machine from the electrical and pneumatic power supply 2. access inside the filter chamber, opening the inspection panel fastened with the specific screws 3. unscrew the screws fastening the cartridge to the upper part of the machine 4. remove the old cartridges 5. clean the flanges before assembling the new filters 6. proceed to assemble the new filters by inserting the specific gaskets as indicate by the manufacturer of the filters 7. when assembly is complete, close the inspection door with the specific screws.
At least quarterly	**Check reliability and functionality:** • of the start motors contactors, • of all relays in the control circuit, • micro switches and proximity switches; • of ducts and cables	Visually inspect to ascertain the condition of the contacts on the relays, the power contacts on the contactors , the solenoid valves, the micro-switches and the proximity switches and the ducts and conductors inside and outside the casings. In these cases, including the single and/or multi-pole cables, if normal conditions do not persist, they must be replaced to ensure correct functionality. **Check the adequate distances of the cams for activation of the micro-switches**. If they are not present or are no longer in their original position, immediately suspend processing to the machine and contact the machine manufacturer.
At least quarterly	**General checks** • of electrical equipment	Check the entire electrical equipment, box and on board machine for continuity of service and operation needs. The efficiency of all visual and acoustic information devices of the safety functions and of the cycle functions of the equipment must also be checked. In the event of lightning strike, they must be replaced with those present or in the "spare material" placed inside the electric box and delivered with the electrical equipment, or with models completely equal to those removed. You must check that parts of the electrical equipment subject to wear, such as: **cables and all operating actuators operated by the operators** are intact and functional, if not, they must be replaced. Any parts or all electrical equipment supplied if designed or approved for use in hazardous environments must be given special attention to ensure that maintenance retains the original efficiency of the safety devices.

FREQUENCY	CHECK	METHODS AND VALIDATION
At least quarterly	**Check reliability and functionality** • of the fixed guards, • of the safety devices	All guards, of devices and circuits indicated must perform their intended function. Directly control the devices to ensure they perform the intended function/ signal. Further and useful instructions for the test methods are outlined in the manuals of the relevant components supplied with the electrical equipment **The necessary inspections relate to:** a. loss or damage of any part of guard, in particular if this causes a reduction in safety functions, a. replacement of parts subject to wear b. correct operation of the interlocks c. deterioration of joints or fastening points d. deterioration due to corrosion, changes in temperature or chemical effects e. satisfactory operation of the mobile parts, if necessary f. change to safe distances and opening dimensions g. deterioration of acoustic behaviour, if applicable. Replacement should be carried out when at least one of the components indicated presents irregular wear, on the first signs of cracks, erosion or breakage. Possible replacement must take place with the manufacturer's original products or at least the equivalent quality and safety. Contact the manufacturer directly.
At least quarterly	**General checks:** • of the pneumatic system of the machine	Check the pneumatic system for service continuity, operational and safety needs. **The necessary inspections relate to**: a. checking intactness and the absence of cracks, folds or otherwise in the pneumatic tubing. When first cracks start to show, replace them with equivalent components. h. air pressure at adequate level, at least 6 bar. Adjust the pressure regulator for compressed air i. correct operation of all the command devices for pneumatic power and the relevant machine actuators j. the state of wear of the air tubes (checking for leaks) and pneumatic fittings k. Use of compressed air with a dew point between +2°C and + 10°C l. cleaning of the separate air filter, installed as close as possible to the point of use and cleaning of the hose with compressed air before its connection m. cleaning of the air filter at the point of delivery/connection to the machine, compressed air. Possible replacement must take place with the manufacturer's original products or at least the equivalent quality and safety.
At least every six months	**Check efficiency** • electrical isolation of the motors	The insulation resistance of the motors must be measured and checked with appropriate instrumentation, so that the measured values are within the limits of acceptability defined by the installation standards and in accordance with the provisions in force at the place of installation.

FREQUENCY	CHECK	METHODS AND VALIDATION
At least every six months	**Check efficiency** • of the connections of the equipotential and protection circuit	With appropriate instrumentation, the resistance towards the ground of the equipotential and protective system and of each connection must be measured and checked, so that the measured values are within the limits of acceptability defined by the installation standards and in accordance with the provisions in force in the place of installation. Within the framework of the requirements - indications stated above, the related ground system installation must fully comply with the applicable requirements for coordination with the associated active devices, according to IEC364_5_54 / HD382_5_54 / IEC 64.8 (5_54) (latest editions).
At least annually	**Check efficiency** • connections and electrical components inside and outside casings	Check there is no loosening. If present, restore the connections in a long-lasting manner by tightening the connections with adequate torque and reported directly on the electrical components. The check must also cover: a. the intactness of the shunt boxes, the shells, the keypads and the protective sheaths of the electric cables; a. functionality of all the control and power actuators.

Possible replacement must take place with the manufacturer's original products or at least the equivalent quality and safety.

The instructions for replacement do not appear in this manual and must therefore be explicitly requested from the manufacturer of the machine, who reserves the responsibility for replacement interventions.

In the following table, you can find all the adjustments and regulations relating to the electrical components and electromechanical and/or magnetic position detection devices, necessary for the continuity of service and operation needs.

For adjustments, regulations, positioning indications for mounting, additional limit switches, cam devices designed to delimit the strokes or movements of the moving parts of the machine, see the diagrams attached to the wiring diagram and/or the layout with the position of the components.

17.3 Cleaning

FREQUENCY	STAFF	ZONE - METHODS
At least weekly	Also the operator	**The workstation and the control station** must be kept tidy and remove any dust any fouling foreign substances. Untidiness can pose a danger of accidents. During cleaning, use dust masks and the additional PPE stated for the type of intervention and based on the substances used in cleaning. Respect the use methods and implement any personal protective equipment, as planned by the manufacturer of these substances.
At least weekly	The maintenance technician	**From the reading heads of the photocells**, of the sensors in general, remove dust and fouling foreign substances: use a vacuum cleaner and/or dry brush. During cleaning, use dust masks and the additional PPE stated for the type of intervention and based on the substances used in cleaning. For identification of the photocells and their position, refer to the layout or the wiring diagram delivered with the machine.
At least every six months	The maintenance technician	**Rust must be removed** formed during transport or storage, on the non-painted parts. For this operation, anti-rust substances must be used specifically placed on the market for this purpose. Respect the use methods and implement any personal protective equipment, as planned by the manufacturer of these substances.
At least weekly	Also the operator	**Clean the outer parts of the E.B.** with a soft and dry cloth that does not lose hair over the surfaces of the entire E.B. and the components installed on the machine: use a vacuum cleaner and/or dry brush. Avoid the use of alcohol, petrol, solvents, and any other type of detergent on non-metallic parts, which, if necessary, can only be cleaned with a strictly neutral, non-foaming water-based detergent. If necessary, the metal parts can be cleaned with a soft cloth that does not lose hair on the rubbed surfaces, slightly soaked with alcohol, ensuring you don't touch the plastic parts that may be close. Do not use abrasive products, colored substances, metal pads, brushes, scrapers, etc. Respect the use methods and implement any personal protective equipment, as planned by the manufacturer of these substances.

18. Extraordinary maintenance

For some of the actions referred to in this paragraph, it may be necessary to remove fixed guards and protective devices from their position. Removal can only be carried out by the maintenance technician.

At the end of the interventions, these guards and protective devices must be stored and locked in their original position, with the fixing systems that were provided before the intervention.
To directly check the guards and protective devices on the machine, see Chapter 4.

The Maintenance manager must completely deactivate the machinery, as in the section outlined, before removing a fixed guard and/or replacing a part of the machine

For extraordinary maintenance and replacement of parts resulting from mechanical or electrical breakages, servicing or faults, such as, for example, a request for intervention directly to the machine manufacturer, you will also be informed of any residual risks that may arise as a result of specific actions.

Instructions for extraordinary maintenance do not appear in this manual and should therefore be explicitly requested from the manufacturer of the machinery.

It is also highlighted that:
Do not attempt to replace and/or repair significant parts
Do not use any welding of damaged parts
Never use the machine if it is not fully efficient.

After major repair or replacement of parts, before subsequent restart, checks, adjustments and tests must be carried out as in Chapter 5, Chapter 6 and Chapter 7 and tested with a positive outcome.

For disposal of worn and replaced materials, refer to the requirements in your country.

18.1 The faults or defect that could lead to machine storage are:

FAULT DEFECT	POTENTIAL CAUSE(S)	INTERVENTION METHODS AND VALIDATION
No mains voltage	Overall blackout Intervention of the protection device against short circuit or any other device placed upstream of the electrical equipment power supply	Contact the electrical energy provider Having eliminated the causes for activation of a protective device, reset it. You are advised to open all the protection/shut-off/sectioning devices of the loads and insert one after another
Processing stoppage	Activation of an emergency stop device or a safety device Intervention of a protective device inside the electric box Unidentifiable cause/s	Having eliminated the causes for activation of a protective device, reset it. You are advised to open all the protection/shut-off/sectioning devices of the loads and insert one after another. Having eliminated the causes for activation of the protective device, reset it. In the event fuses blow, replace them with fuses which are identical **in model,** calibration and tripping curve. You are advised to open all the protection and sectioning devices of the loads and insert one after the other Contact the manufacturer directly

FAULT DEFECT	POTENTIAL CAUSE(S)	INTERVENTION METHODS AND VALIDATION
The machine won't start.	No power supply voltage Sectioning devices "**OFF**". One or more emergency/safety systems have enabled. Fuses tripped or circuit breakers not working.	Check and reset the electrical energy. Turn the sectioning devices "**ON**". Reset the emergency systems and, if necessary, check they are working properly. Replace the tripped fuses, check the condition of the circuit breaker switches.
The machine is making noise.	The mobile elements of the machine are not adequately lubricated.	Check and eliminate any blockages of the mobile elements and/or carry out lubrication interventions
The machine is vibrating.	Material blocked/stuck in fan Product with excess weight.	Remove the stuck material by dismantling the motor unit. Exclusive intervention for MAINTENANCE TECHNICIAN or specialist staff. Check the dust collectors (bin or bag for collection) have not exceeded the maximum quantity of dust permitted. Empty the collectors.
The motors won't start	No power supply voltage Sectioning devices "**OFF**". One or more emergency/safety systems have enabled. Fuses tripped or circuit breakers not working. No buttons working	Check and reset the electrical energy. Turn the sectioning devices "**ON**" Reset the emergency systems and, if necessary, check they are working properly. Replace the tripped fuses, check the condition of the circuit breaker switches. Check the efficiency of the START buttons
Reduced performance	Filter system clogged The metal collection bin is not correctly locked Too many extraction openings open	Proceed to clean or replace the filter system Remove the bin and position it again Close the extraction openings of the machines not used and only leave those in use open
The bag inside the bin is sucked in	The metal collection bin is not correctly locked The negative pressure system does not hermetically close and cannot recreated the vacuum in the bin	Remove the bin and position it again Check the gasket of the negative pressure system is well positioned. Replace if worn

19. Attachments

Document	Document code
Wiring diagram	A
Performance of the fan	B
Declaration of Conformity	C
IFA / BGIA CLASSIFICATION	D
CARTRIDGE 1: Filter fabric technical specifications - POLYESTER / L	E
CARTRIDGE 2: Filter fabric technical specifications - ANTISTATIC POLYESTER / M	F
CARTRIDGE 3: Filter fabric technical specifications - ANTISTATIC POLYESTER / H13	G
Maintenance register, events and faults	G

20. Checks to carry out a month after installation and annually

One month after installation and annually perform the following checks:

• Check all the power conductors and the ground connections. If necessary, tighten to ensure good contact.

• Check the intactness of the dust separator.

• Ensure inside the unit and connection tubes are free of deposits. Accumulation of deposits in the conductors can cause electrostatic discharge.

• Clean the area around the unit and all storage areas of the collected material to avoid dust deposits.

• Check that all safety plates/markings are in position and legible.

20.1 Emptying the dust collection metal bin

	WARNING! Risk of personal injuries • Check the absence of negative pressure in the dust separator before removing the dust collection container. • Risk of crushing. Lower and carefully place the dust collection container. Use appropriate protective equipment. • Wear a protective mask

Replace the plastic bag when the same is 2/3 full.

	**NOTE!** Only use CWI plastic bags

20.2 To replace the plastic bag inside the metal bin

1. Switch off the machine and wait 30 seconds for the fan to terminate its movement;
2. Check there is no vacuum in the dust separator;
3. Remove the dust collection container lifting the locking lever;
4. Seal and remove the plastic bag you want to replace. Use a tie or equivalent;
5. Insert a new plastic bag in the dust collection container;
6. Turn the outer edge outwards of the bag around the edge of the metal bin;
7. Reassemble the dust collection container on the dust separator;
8. Lower the locking lever until the trolley is completely locked;
9. Check the dust collection container is sealed on restoring the negative pressure in the dust separator.

⚠	**CAUTION!** Risk of damage to the equipment Never use the unit without the plastic bag.

20.3 Main filter cartridge

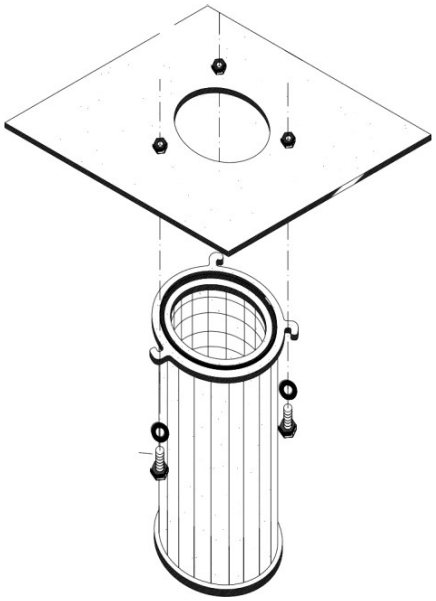
⚠	**WARNING!** Risk of personal injuries Use protective equipment and appropriate lifting.

20.4 Main filter: Filtering cartridge

Replace the main filter completely every 2,000 hours of operation and at least every 12 months.

To replace the main filter:

1. Turn off the machine and wait 30 seconds for the fan to finish moving.
2. Loosen the three locking screws
3. Remove the cartridge by rotating it and remove it from the case
4. Put the old filter in a large plastic bag or wrap it in plastic film.
5. Mount the new filter and tighten the three fixing screws

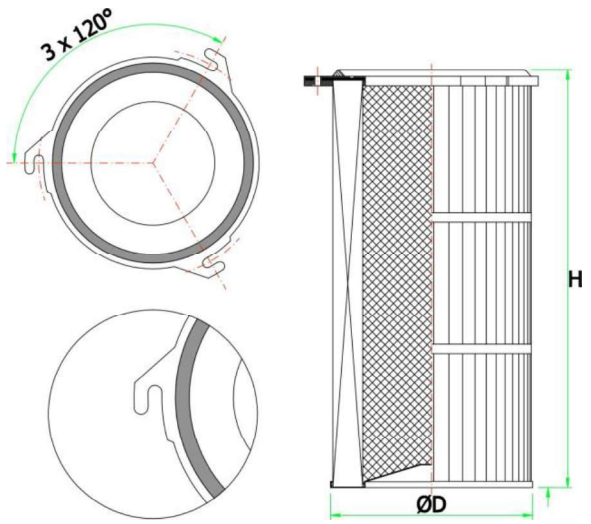


ⓘ	**NOTE!** Avoid dust spreading

20.5 Install the new main fabric filter.

⚠	**CAUTION!** Risk of damage to the equipment It is important not to allow dust, objects or dirt fall in the side channel of the fan.

20.6 Filter Cartridge



Diameter (D)	Ø 325 mm
High (H)	1000 mm
n. Pleats	175
Filtering surface	16 m^2
Type of coupling	3 P1

The cartridge filter distributed by CWI Woodworking Technologies is the highest quality product, made in Italy. For this reason, it lasts extremely long, and if not damaged or physically worn with holes or tears, can be used for years.

20.6.1 Routine maintenance

You can proceed with its routine maintenance, using the manual cleaning system by operating the external crank. This cleaning procedure can be carried out whenever you think it is useful: a clean filter guarantees constant extraction power.

ⓘ	**NOTE!** Routine manual cleaning with the external crank must be carried out **ONLY with the fan turned off** and for 5 or 6 seconds

20.6.2 Extraordinary maintenance

The CWI cartridge filter is manufactured in washable polyester fabric.
To maintain its efficiency, you can then proceed with thorough extraordinary cleaning with water, using, for example, a pressure washer and following the instructions below:

CWI filter cartridges are made of polyester and can be washed several times (we recommend a maximum of 3 times) using a high pressure washer, respecting the following rules:

» Pressure at maximum

» Maximum temperature 100°C

» Detergent Ph = 5/6

The cartridge should be cleaned slowly, directing the jet in just 8/10 numbers of folds from top to bottom, maintaining a distance from the nozzle of about 30 cm.

The cartridge washed and emptied by the residual water must be carefully dried in order to ensure a smooth operation after regeneration.

There are two ways to dry the cartridge:

» Drying at room temperature for a period of one week

» Drying in the oven at a maximum temperature of 100 ºC for a period of 12 hours

After regenerating the cartridge following the above procedure, it is possible to use the cartridge again

20.7 Fan support

	**WARNING!** Risk of personal injuries Use appropriate equipment for protection and lifting.

	**CAUTION!** Risk of damage to the equipment It is important not to allow dust, objects or dirt fall in the side channel of the fan.

20.7.1 Replacement intervals of the bearings

The motor unit and rotor is equipped with two bearings, one on the upper part of the motor and one on the lower part of the tie rod. Replace them every approx. 20,000 hours of use. If the working temperature regularly reaches 40°C, they must be replaced every 15,000 hours. In any case, replace the bearings every 5 years. Consult the manual of the fan for further information relating to the bearings and the types of grease.

The bearings are the standard model. Contact CWI or an authorised CWI distributor for replacement of the bearings.

The old grease must be removed and replaced with new grease. The grease must comply with standard DIN 51825-K2N 40, SKF LGHP 2 or FAG Arcanol Multitop

21. Spare parts

	**CAUTION!** Risk of damage to the equipment Exclusively use original spare parts by CWI.

Contact your local authorised dealer or CWI Woodworking Technologies for consultancy in the event of technical interventions or spare part requirements.

21.1 Ordering spare parts

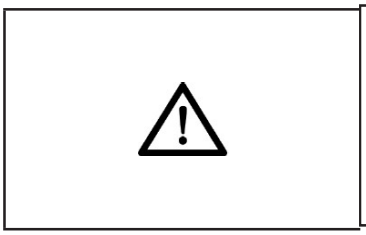
On the spare parts order, always indicate:

- Serial number and control number (refer to the identification plate of the product).
- The reference number of the spare part and the name.
- Desired quantity of spare parts.

22. Recycling

The product was designed to recycle the materials composing it. The different types of materials must be managed in compliance with local standards in force. If in doubt on product disposal at the end of its life, contact the dealer or CWI Woodworking Technologies.

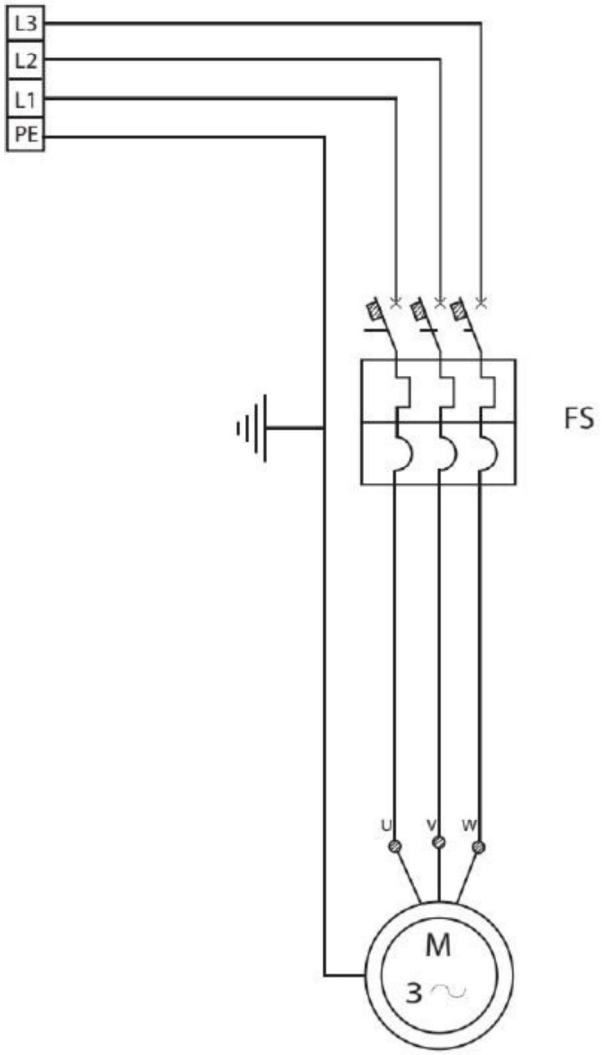
23. Troubleshooting



WARNING!
Risk of personal injuries
• Use suitable protective devices if you risk exposure to dust.
• Electrical works must be carried out by a qualified electrician.
• Always disconnect the supply voltage via the maintenance switch before performing any mechanical or electrical service. Always lock the maintenance switches "off"

If the troubleshooting guide does not solve the problem, contact the local dealer or CWI for technical advice.

ATTACHMENT A | WIRING DIAGRAM

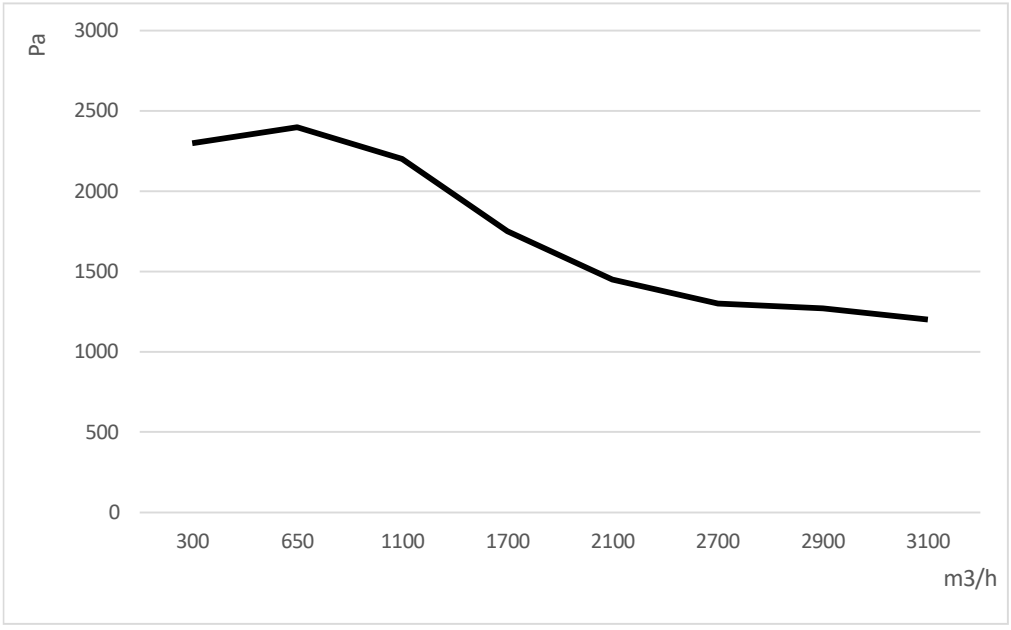


FS		M		
Protezione magnetotermica	4 - 6,3 A	Potenza Motore	2,2 kW - 3 HP	CWI-DCP350H-VC
Overload protection		Motor power		
Magnetothermique		Moteur		225/06/2024
Magnetothermischer		Motor		AA

ATTACHMENT B | PERFORMANCE OF THE FAN

Description	
Installed power	2.2 kW - 3 HP
Voltage	Single Phase / 220 V - 60Hz
Poles	2 - 2,800 rpm
LpA[dB(A)]	69
Maximum capacity	2800 m^3/h
Maximum pressure	2600 Pa

Ø Extraction	mm	**200**	**160**	**140**	**120**	**100**	**80**	**60**	**40**
Speed	m/sec	**44**	**46**	**49**	**53**	**60**	**59**	**61**	**60**



ATTACHMENT C | IFA / BGIA CLASSIFICATION

Use class	Concentration	Maximum release authorised
L	Dust filtration with AGW values > 1 mg/m3	< 1.0%
M	Dust filtration with AGW values ≥ 0.1 mg/m3	< 0.1%
H	Dust filtration with AGW values, dust from dangerous carcinogens and dust containing pathogens	< 0.005%

IFA-BGIA: Professional Institute for Occupational Safety (Bonn - Germany)

AGW: Workplace exposure limit value (Arbeitsplatzgrenzwerte)

DESCRIPTION AND SCOPE

IFA-BGIA aims to ensure the safety of workers in the workplace.

The analysis of filter media is carried out by establishing use classes L, M, H.

BIA has also established an exposure limit value (AGW) beyond which the safety of workers in the workplace is no longer guaranteed. The limit value for exposure to a polluting compound represents the concentration present in the air that a person can breathe for a limited period of 15 minutes without having immediate toxic effects.

The IFA-BGIA test is performed using the following parameters:

- Passage speed of 0.056 m/s
- Quartz dust in concentration 200 ± 20 mg/m3
- Grain size varying between 0.2 and 2 microns

ATTACHMENT D	CARTRIDGE POLYESTER / L

TECHNICAL CHARACTERISTICS: COL 200B

COL 200B filter fabric is a non-woven polyester made by spunbonded process. This manufacturing method allows to have no variation on the air permeability allowing a better filtration efficiency, and high stability.

The IFA-BGIA certification (copy available on request) of COL 200B complies with DIN EN 60335-2-69:2008 directives, which requires a release of less than 0.5% for dust with a particle size between 0.2 and 2 micron with a passage rate of 0.5056 m/s corresponding to a classification category L.

COL 200B has very high mechanical strength (elongation at the transversal traction 37%). The maximum temperature for continuous operation is 130ºC.

COL 200B has excellent resistance to various chemicals.

The smooth surface enables excellent detachment to be obtained of the dust

Name	-	COL 200B
Composition	-	100% Polyester/Spunbonded
Weight	[g/m^2]	200
Thickness	[mm]	0.44
Density	[g/cm^3]	-------
Maximum resistance to transversal traction	[N/5cm]	960
Maximum resistance to longitudinal traction	[N/5cm]	490
Maximum elongation to transversal traction	[%]	37
Maximum elongation to longitudinal traction	[%]	29.6
Air permeability	[m^3/m^2/h]	1200 approx.
Dimensions of pores	[µm]	Not measurable
Volume of pores	[%]	66
Water absorption	[%]	-------
Certificate of efficiency IFA / BGIA	-	L
Colour	-	White
Filter surface	[m^2]	16

ATTACHMENT E	CARTRIDGE ANTISTATIC POLYESTER / M

TECHNICAL CHARACTERISTICS: COL 270B-AL / anti-static

COL 270B-AL filter fabric is a non-woven polyester made by spunbonded process. This manufacturing method allows to have no variation on the air permeability allowing a better filtration efficiency, and high stability.

The electrical surface conductivity of the COL 270B-AL filter fabric is obtained by the application of aluminium powders. The support created guarantees excellent porosity to the fabric. This treatment is the solution for all applications that require the elimination of electrical charges that are created on the dust non powders, solo qui the filter media.

The filter fabric COL 270B-AL is used in all cases where dust at risk of explosion is filtered (explosion proof systems) because the high electrical conductivity value (Rd < 10^3 Ohms) eliminates all the electrostatic charges present on the fabric. **The IFA-BGIA certification (copy available on request) of COL 270B-AL complies with the DIN EN 60335-2-69:2008 directive, which requires a release of less than 0.1% for dust with a particle size between 0.2 and 2 micron with a passage rate of 0.5056 m/s corresponding to a classification category M.**

COL 270B-AL has excellent chemical resistance to organic solvents. The maximum temperature for continuous operation is 150ºC. COL 270B-AL has a particularly smooth surface, which allows optimal detachment to be obtained of the dust.

Name	-	COL 270 B-AL
Composition	-	100% Polyester/Spunbonded
Weight	[g/m^2]	270
Thickness	[mm]	0.63
Density	[g/cm^3]	-------
Maximum resistance to transversal traction	[N/5cm]	1300
Maximum resistance to longitudinal traction	[N/5cm]	750
Maximum elongation to transversal traction	[%]	40
Maximum elongation to longitudinal traction	[%]	30
Air permeability	[$m^3/m^2/h$]	670 approx.
Dimensions of pores	[µm]	Not measurable
Volume of pores	[%]	68
Water absorption	[%]	-------
Certificate of efficiency IFA / BGIA	-	M
Certificate of electrical resistance	-	EXAM Accredited / ATEX
Colour	-	Grey
Filter surface	[m^2]	16

ATTACHMENT F	CARTRIDGE ANTISTATIC POLYESTER TEFLON / H 13

TECHNICAL CHARACTERISTICS: COL 270B-TFMA / anti-static

COL 270B-TFMA is a spunbonded polyester fabric with a microporous antistatic PTFE (teflon) membrane. The production method ensures constant, uniform air permeability with excellent filtering efficiency and high stability.

The electrical surface conductivity of the **COL 270B-TFMA** filter fabric is obtained by the application of aluminum powders. The support created guarantees excellent porosity to the fabric. This treatment is the solution for all applications that require the elimination of electrical charges that are created on the dust non powders, solo qui the filter media.

The **COL 270B-TFMA** withholds virtually all dust on the outside thanks to the PTFE filtering antistatic membrane.

The **COL 270B-TFMA IFA-BGIA** certificate (a copy is available upon request) complies with DIN EN 60335-2-69:2008 Directives specifying release less than 0,1% for 0,2 to 2 micron size range dust and a flow rate of 0,056 m/s corresponding to a M rating.

It is suitable for continuous use at 130°C with maximum peaks of 150°C. **COL 270B-TFMA-H13** is particularly suitable for critical very fine, adherent or fibrous dust.

Name	-	COL 270B-TFMA
Composition	-	100% Polyester/Spunbonded with a microporous antistatic PTFE (teflon) membrane.
Weight	[g/m^2]	280
Thickness	[mm]	0.80
Density	[g/cm^3]	-------
Maximum resistance to transversal traction	[N/5cm]	700
Maximum resistance to longitudinal traction	[N/5cm]	500
Maximum elongation to transversal traction	[%]	------
Maximum elongation to longitudinal traction	[%]	------
Air permeability	[m^3/m^2/h]	180-300 approx.
Dimensions of pores	[µm]	Not measurable
Volume of pores	[%]	60
Water absorption	[%]	-------
Certificate of efficiency IFA / BGIA	-	H 13
Certificate of electrical resistance	-	EXAM Accredited / ATEX
Colour	-	Grey
Filter surface	[m^2]	16

Blue Heaven Technologies

2820 S. English Station Road - Louisville, KY 40299

Phone: (502) 357-0132 - Website: www.blueheaventech.com

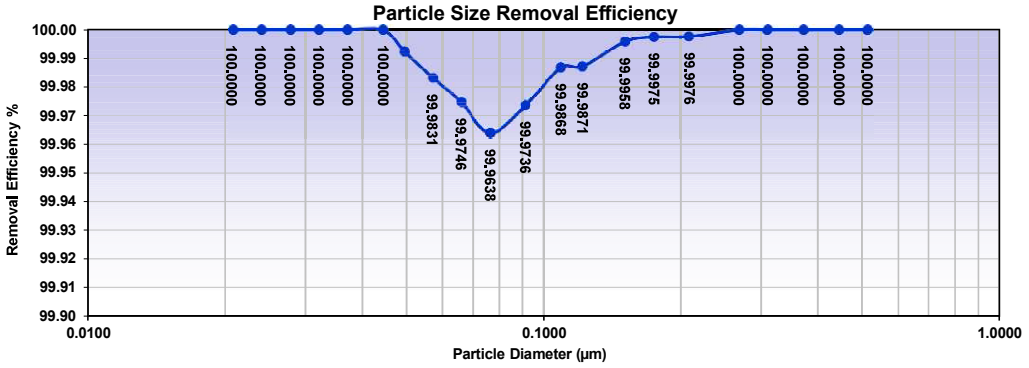
Date: 13-Dec-16 **TEST NO.** 16-1880

EN-1822-3:2009

Test Report

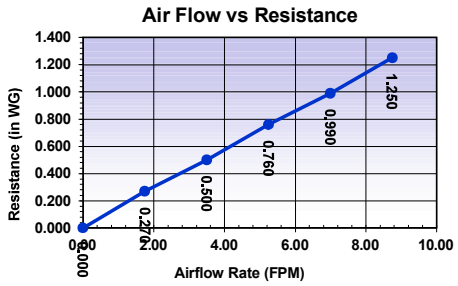
Efficiency / MPPS / Resistance

Media Information	Manufacturer	ALTAIR INDUSTRIAL FILTERS
	Part Number / Media Identification	COL270B-TFMA-H
	Nominal Dimensions	8.25" X 11.75"
	Media Type	100% Polyester+Antistatic+PTFE Membrane
Test Conditions	Test Air Flow Rate (FPM)	7
	Challenge Aerosol	DEHS
	Particle Measurement Equipment	TSI 3080 Classifier / TSI 3772 Counter
	Test Air Temperature (ºF)	70.5
	Relative Humidity (%)	28.5
	Barometric Pressure (Inches Hg)	29.55
Test Results	Initial Resistance ("WG)	1.250
	MPPS Determination (µm)	0.0764
	Efficiency at MPPS (%)	99.9638
	Projected Rating (Min.Integrel for H14=99.995%)	H13



Media Resistance

Air Flow (FPM)	Resistance (in WG)
0.00	0.000
1.75	0.270
3.50	0.500
5.25	0.760
Test Flow Rate 7.00	0.990
8.75	1.250



Comments

Requester Information

Test Requestor	Mr. Sergio Musciacchio	Phone:	+39 011 9973113
Company Name	ALTAIR INDUSTRIAL FILTERS	Email:	info@altair-srl.com
Company Address	Via Caselle 113 – Leinì (TO)	Date Requested:	11/8/2016
Test Performed by:	Glen D. Toloczko CAFS	Completion Date:	12/13/2016

FRM 5.4-321-02 EN 1822-5
High Efficiency Air Filter Test - TSI Rev: 0 Date: 11/30/10

Blue Heaven Technologies
2820 S. ENGLISH STATION ROAD - LOUISVILLE, KY 40299
Tel: (502) 357-0132

EN 1822
Test Report

Test No. 16-1880
Date: 13-Dec-16

Data - Initial Resistance

Airflow (FPM)	Resistance (in WG)
0.00	0.000
1.75	0.270
3.50	0.500
5.25	0.760
7.00	0.990
8.75	1.250

Data - Particle Removal Efficiency

Particle Size Range (µm)	MPPS	Particle Removal Efficiency (µm)	(%)	
20.90		0.0209	100.0000	
24.10		0.0241	100.0000	
27.90		0.0279	100.0000	
32.20		0.0322	100.0000	
37.20		0.0372	100.0000	
44.50		0.0445	100.0000	
49.60		0.0496	99.9923	
57.30		0.0573	99.9831	
66.10		0.0661	99.9746	
76.40	MPPS	0.0764	99.9638	
91.40		0.0914	99.9736	
109.40		0.1094	99.9868	
121.90		0.1219	99.9871	
151.20		0.1512	99.9958	
174.70		0.1747	99.9975	
209.10		0.2091	99.9976	
269.00		0.2690	100.0000	
310.60		0.3106	100.0000	
371.80		0.3718	100.0000	
445.10		0.4451	100.0000	
514.00		0.5140	100.0000	

Edition 1.2 - June 2024

ASSEMBLY AND TESTING REPORT

PRODUCT DATA

Name	CWI-DCP350H-VC		**Serial**	
Year	2025		**Ref.**	-

THE PRODUCT DESCRIBED HAS BEEN TESTED SUCCESSFULLY

	PRELIMINARY CHECKS
☐	Product completeness and integrity
☐	Integrity of intrinsic security
☐	Absence of visible defects
	ASSEMBLY CHECKING
☐	Correct assembly of components
☐	Affixing marking
☐	Mechanical protection
☐	Warnings Electrical Hazard
☐	Warnings Mechanical Hazard
☐	Warning residual risk

	FUNCTIONAL TEST
☐	Free movements, opening and closing
☐	Starting and stopping devices
☐	Emergency devices
☐	Safety devices
☐	Adjustments and settings
	PERFORMANCE TEST
☐	Performance matching
☐	Limited and acceptable functional noise
☐	Absence of hazardous emissions
☐	No damage and deformation due tothe testing

The successful execution of the tests described above, constitutes the suitability for use of the product, as well as the formal act of final delivery of the same product, at its place of installation and use.

By signing this Assembly and Testing Report, the Manufacturer:

1. Confirms the suitability and functionality of the product to the use for which it was produced;
2. Declares to deliver the instructions for the use and maintenance of this product, indicates to read it and make it available to all those who will be authorized to use it;
3. Indicates to respect the correct use of the product and to maintain the correct level of good functioning and state of preservation, in accordance with the instructions for use and maintenance;
4. Declares to deliver the relevant EC declaration of conformity with the product

Place	Rimini	**Date**	18/06/2025	ALFARIMINI s.r.l. Via Luciano Lama, 14 47924 RIMINI (RN) Tel. 0541.856208 - Fax 0541.857907 C.F. - P.I.: 03720430 409
Manufacturer's signature		**Stamp of the manufacturer**		

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EC DECLARATION OF CONFORMITY

The undersigned, representative of the following manufacturer

Manufacturer	CWI WOODWORKING TECHNOLOGIES
Address	1967 St. Matthews Ave, Winnipeg, MB R3H 0J1 Canada

has appointed the person authorised to compose and preserve the technical file

Name	Antonino Amato
Address	Via Luciano Lama,14 47924 Rimini (RN) ITALY

The manufacturer hereby declares below that the machine

General / commercial name	**FILTER UNIT FOR DUST AND CHIPS**
Function	**DAMPING OF EMISSIONS IN THE ATMOSPHERE COMING FROM WOOD, PVC, METAL AND SIMILAR PROCESSING**
Type	**CWI-DCP350H-VC**
Serial number	
Year of manufacture	2025

results as compliant with all the relevant provisions outlined by the following European directives (including all the applicable amendments)

2006/42/EC - Machinery Directive
2014/30/EC - Electromagnetic Compatibility Directive
2014/35/EC - Low Voltage Directive and subsequents modification

Rimini (Italy), ... 18.06.2025 ... (date).

..... (signature)

ANTONINO AMATO – Sole Director

ATTACHMENT H	MAINTENANCE RECORD

MAINTENANCE RECORD

MAINTENANCE EVENTS AND FAULTS

Compilation by user or maintenance technician

Model	**CWI-DCP350H-VC**
serial no.	

Additional control items and suggestions

Control items
Inspect/clean the outer unit
Remove the deposits of dust, clean the work area
* Inspect/clean the inner unit
Power supply conductor connections and ground cable, check
Start and stop, check
Filter cleaning, check
Filter manual cleaning, check
Filter sleeves, check
Filter sleeves, check reduction in pressure/performance
Ground measurement/check (≤100 ohm):
GND1 – Electric fan
Ground measurement, check (≤105 ohm)
* On replacing the bags

Control items
Conductor inbound - Mains ground input
GND1 – External mains ground
Main filter, replacement
Plastic bag, replacement
Bearings, motor, replacement
Bearings, fan, replacement

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MAINTENANCE RECORD

This maintenance record contains the records of the activities for installation, maintenance, repair and changes performed, and should be made available for any inspections by the authorised bodies.

Description of the intervention (Cross the box corresponding to the intervention performed. Describe any residual risks and/or foreseeable misuse)					
☐ Installation	☐ Start-up	☐ Adjustments	☐ Maintenance	☐ Repair	☐ Changes
Date:		Technician´s signature:		Client´s signature:	

Description of the intervention (Cross the box corresponding to the intervention performed. Describe any residual risks and/or foreseeable misuse)					
☐ Installation	☐ Start-up	☐ Adjustments	☐ Maintenance	☐ Repair	☐ Changes
Date:		Technician´s signature:		Client´s signature:	

Description of the intervention (Cross the box corresponding to the intervention performed. Describe any residual risks and/or foreseeable misuse)					
☐ Installation	☐ Start-up	☐ Adjustments	☐ Maintenance	☐ Repair	☐ Changes
Date:		Technician´s signature:		Client´s signature:	

Description of the intervention (Cross the box corresponding to the intervention performed. Describe any residual risks and/or foreseeable misuse)					
☐ Installation	☐ Start-up	☐ Adjustments	☐ Maintenance	☐ Repair	☐ Changes
Date:		Technician´s signature:		Client´s signature:	

Edition 1.2 - June 2024

MAINTENANCE RECORD

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Description of the intervention (Cross the box corresponding to the intervention performed. Describe any residual risks and/or foreseeable misuse)											
	Installation		Start-up		Adjustments		Maintenance		Repair		Changes
Date:		Technician´s signature:		Client´s signature:							

Description of the intervention (Cross the box corresponding to the intervention performed. Describe any residual risks and/or foreseeable misuse)											
	Installation		Start-up		Adjustments		Maintenance		Repair		Changes
Date:		Technician´s signature:		Client´s signature:							

Description of the intervention (Cross the box corresponding to the intervention performed. Describe any residual risks and/or foreseeable misuse)											
	Installation		Start-up		Adjustments		Maintenance		Repair		Changes
Date:		Technician´s signature:		Client´s signature:							

Description of the intervention (Cross the box corresponding to the intervention performed. Describe any residual risks and/or foreseeable misuse)											
	Installation		Start-up		Adjustments		Maintenance		Repair		Changes
Date:		Technician´s signature:		Client´s signature:							

DATA SHEETS FOR RECORD OF EVENTS

REPLACEMENT OF STRUCTURAL ELEMENTS

Replacement part of:.....Date:.....

Code:.....Manufacturer:.....Serial number: .....

Replaced with element:.....

Code:.....Manufacturer:..... Serial number: .....

Reason for replacement:.....

.....

Company responsible for replacement:.....

The maintenance technician:.....The user:.....

Replacement part of:.....Date:.....

Code:.....Manufacturer:..... Serial number: .....

Replaced with element:.....

Code:.....Manufacturer:..... Serial number: .....

Reason for replacement:.....

.....

Company responsible for replacement:.....

The maintenance technician:.....Theuser:.....

Replacement part of:.....Date:.....

Code:.....Manufacturer:.....Serial number: .....

Replaced with element:.....

Code:.....Manufacturer:..... Serial number: .....

Reason for replacement:.....

.....

Company responsible for replacement:.....

The maintenance technician:.....The user:.....

DATA SHEETS FOR RECORD OF EVENTS

REPLACEMENT OF STRUCTURAL ELEMENTS

Replacement part of:..Date:..

Code:..Manufacturer:...Serial number: ....

Replaced with element:..

Code:..Manufacturer:... Serial number: ....

Reason for replacement:..

....

Company responsible for replacement:...

The maintenance technician:..The user:..

Replacement part of:..Date:..

Code:..Manufacturer:...Serial number: ....

Replaced with element:..

Code:..Manufacturer:... Serial number: ....

Reason for replacement:..

....

Company responsible for replacement:...

The maintenance technician:..The user:..

Replacement part of:..Date:..

Code:..Manufacturer:...Serial number: ....

Replaced with element:..

Code:..Manufacturer:... Serial number: ....

Reason for replacement:..

....

Company responsible for replacement:...

The maintenance technician:..The user:...

FAULT OF SIGNIFICANT IMPORTANCE AND RELEVANT REPAIRS

Description of the fault :.....
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Causes :.....
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.....
Repair carried out :.....
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.....
Location ..... Date .....
The manager of the repair..... The user .....

Description of the fault :.....
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.....
.....
Causes :.....
.....
.....
.....
Repair carried out :.....
.....
.....
Location ..... Date .....
The manager of the repair..... The user .....

Description of the fault :.....
.....
.....
.....
Causes :.....
.....
.....
.....
Repair carried out :.....
.....
.....
Location ..... Date .....
The manager of the repair..... The user .....

IDENTIFICATION DATA

Manufacturer
CWI Woodworking Technologies
1967 St. Matthews Avenue
Winnipeg, MB R3H 0J1 Canada
204.786.3196 Ext. 5
www.cwimachinery.com
sales@cwimachinery.com

TYPE OF MACHINE

Generic/commercial name	**DUSTFX 3HP VORTEX CYCLONE DUST COLLECTOR**
Function	**DAMPING OF EMISSIONS IN THE ATMOSPHERE COMING FROM WOOD PROCESSING**
Type	**CWI-DCP350H-VC**
Serial No. Series	
Year of manufacture	**2025**

DOCUMENT
USE AND MAINTENANCE MANUAL
No. volumes: 1
Date: 24/03/2023
Review: 00