

# USE AND MAINTENANCE MANUAL SERIES TX





#### TRANSLATION FROM ORIGINAL INSTRUCTIONS

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11 13

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#### 1. INFORMATIVE SECTION



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

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Manuals for the ATEX components mounted on the equipment are provided in the appendix: the user must observe all safety instructions regarding the use of these components. The plug is of the ATEX type.



#### 1.1 Foreword

**Dear Customer** 

Thank you for having chosen DEPURECO; we hope you will enjoy using your new DEPURECO series TX vacuum cleaner

This manual has been drafted in order for our customer to fully appreciate the quality of this machine. Please read all sections before using the machine for the first time.

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

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



#### For the safety of people



For the integrity of the vacuum cleaner



#### For the safeguard of the environment

This manual describes the following models:

TX 300	TX 300	Z22 🐼
TX 400 P	TX 400 P	Z22 😥
TX 400 S		
TX 550 P	TX 550 P	Z22 😥
TX 550 S	TX 550 S	Z22 😥
TX 750		

L'aspiratore può essere equipaggiato con i seguenti filtri:

M FILTER TEFLON- COATED M FILTER ANTISTATIC M FILTER NOMEX FILTER	(P11718) (P11719) (P11847) (P11840)		
<ul> <li>☐ H FILTER CARTRIDGE (if provided)</li> <li>☐ CARTRIDGE FOR THE C.C.A. CLEANING SYSTEM (if provided)</li> </ul>			



These vacuum cleaners are classified according to the following dust classes:

L

Moderate risk - suitable for separating dust with an exposure limit value depending on the occupied volume > 1 mg/m3

M

Medium risk - suitable for separating dust with an exposure limit value depending on the occupied volume > 0.1 mg/m3

Н

High risk-suitable for separating all dusts with all exposure limit values according to the volume occupied, including carcinogenic and pathogenic dusts.

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

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

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

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

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

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

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

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

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

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

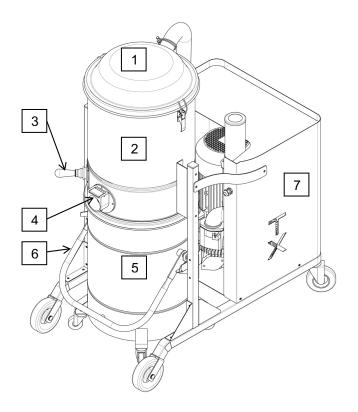
This manual should be kept in a place accessible to all personnel in charge with operating and performing maintenance on the vacuum cleaner. In the event of any dispute arising, the Court of Turin (Italy) shall have jurisdiction

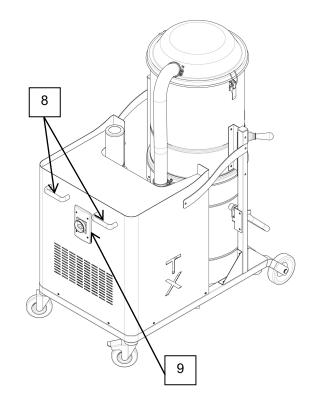


This manual forms an integral part of the vacuum cleaner. Read this manual and the other attachments supplied carefully. Knowledge of the instructions here contained is indispensable for the safe use and maintenance of the vacuum cleaner.



#### 1.2 Main parts

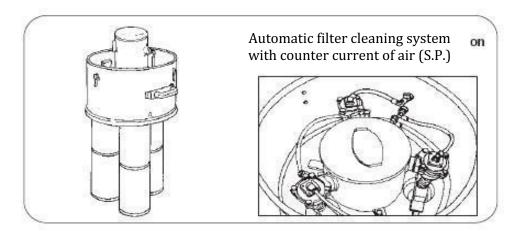




- 1) Vacuum cleaner cap
- 2) Filter chamber
- 3) Filter cleaning lever
- 4) Suction spout
- 5) Dirt container
- 6) Container handle
- 7) Pump cover
- 8) Vacuum cleaner handles
- 9) I/O Switch



#### 1.3 Optional parts



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

#### 1.4 Manufacturer's identification data

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

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

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e-mail: <a href="mailto:depureco@depureco.com">depureco.com</a>
website: <a href="mailto:www.depureco.com">www.depureco.com</a>

P.I. 02258610357

#### 1.5 Identification plate

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



#### 1.6 Atex marking





#### 1.7 Permitted uses

These vacuum cleaners are constructed and designed in accordance with Directive 2014/34/EU (ATEX) for professional industrial use only; however, for purposes other than normal domestic use.

This vacuum cleaner, is suitable for performing cleaning and collection of solid materials and only in covered areas.



This vacuum cleaner is designed to collect combustible dust and/or dry particles in atmospheres classified as Zone 22 (valid for atex vacuum cleaners), with the following limitations:

Minimum ignition energy (MIE) of dust > 3mJ

The vacuum cleaner is designed to be used by a single operator.

In accordance with Directive 1999/92/EC, if there is the presence of combustible dust and/or flammable gases in the workplace, it is the responsibility of the Employer to carry out the classification of the Zone, and choose an appropriate Category machine (as defined in Directive 2014/34/EU).

Extraction of chemically unstable dust is prohibited. Any other use is considered **IMPROPER** 

#### 1.8 Authorized environmental conditions

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

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

#### 1.9 Noise level

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

TX 750	79 dB(A)	
TX 400 P		
TX 400 S		
TX 550 P	76 dB(A)	
TX 550 S		
TX 750	79 dB(A)	



#### **WARNING!**

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



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



#### 1.10 Technical data

#### TX STD

	1		T	T	ı	ı	
	U.M.	TX 300	TX 400 P	TX 400 S	TX 550 P	TX 550 S	TX 750
Weight*	[Kg]	130	14	10	155		190
Overall dimentions**	[mm]			1100x65	50x1400		
Voltage / Frequency	[V]- [Hz]			400 -	50/60		
Power	[kW-HP]	3 - 4	4 4 - 5,5		5,5 - 7,5		7,5 - 10
Maximum depression	[mBar]	310	250	430	330	510	330
Airflow rate	[m³/h]	420	530	330	530	330	730
M filter surface	[m²]	3,8					
H filter surface (if provided) [m²] 2			,8				
C.C.A. cartridges surface (if provided)	[m²]	9,0					
Noise level	[dB-A] 74 76		79				
Container [L] 100							

weight without packaging - packaging weight = 18 Kg machine dimensions without packaging



#### TX ATEX

	U.M.	TX 300 EX	TX 400 P EX	1	TX 550 P EX	TX 550 S EX	1
Weight*	[Kg]	130	14	10	15	55	/
Overall dimentions**	[mm]			1100x6	50x1400		
Voltage / Frequency	[V]- [Hz]			400 -	50/60		
Power	[kW-HP]	3 - 4	4 - 5,5		5,5 - 7,5		/
Maximum depression	[mBar]	270	310	/	270	470	/
Airflow rate	[m³/h]	350	450	/	550	320	/
M filter surface	[m <sup>2</sup> ]			3	,8		
H filter surface (if provided)	[m²]	2,8					
C.C.A. cartridges surface (if provided)	[m²]	9,0					
Noise level	[dB-A]	74 76		/			
Container capacity	[L]	100					

weight without packaging - packaging weight = 18 Kg machine dimensions without packaging



#### 1.11 Warranty

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

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

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

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

The guarantee does not cover cleaning of working parts.

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

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

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

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

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

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



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



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



#### 2. SAFETY SECTION

#### 2.1 Safety informations



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

The appliance is not intended for use by persons (including children) whose physical, sensory or mental capacities are impaired, or who lack experience or knowledge, unless they have benefited, through the intermediary of a person responsible for

their safety, of supervision or instruction concerning the use of the equipment. Children should be supervised to ensure that they do not play with the appliance.

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

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

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

DEPURECO carefully designs and manufactures the equipment and its accessories, identifying and compensating for all possible risks associated with its use. In the event that tools, procedures, working methods or techniques are used, which are not explicitly provided for by DEPURECO, it will be necessary to ascertain in advance, that there are no dangers to oneself and others, with DEPURECO's responsibility remaining excluded in any case.



Use only original Depureco spare parts.

Depureco accepts no responsibility for the use of nonoriginal spare parts.



#### 2.2 Safety recommendations



#### **WARNING!**

The directions below play an important role in completely preserving you from all the hazards you may incur when operating the vacuum cleaner. However, they cannot replace the expertise and common sense of the operator as an overall framework for careful accident prevention. Structural damage, modifications, alterations, or improper repair may alter the protective capabilities of the vacuum cleaner thereby nullifying this certification and excluding any liability on the part of DEPURECO. Additional safety requirements specific to different operations are listed in each section.

The manual must accompany the vacuum cleaner in case of resale

#### **WARNING!**

#### Commissioning - connection to the power grid

- Before commissioning, make sure the vacuum cleaner has no obvious damage.
- Insert the plug of the connecting cable into an outlet with properly installed contact/grounding connection. Make sure the vacuum cleaner is turned off.
- Main cable plugs and connectors must be protected from water splashes.



Ensure that the grounding clamp is properly connected, to a point for which continuity with the grounding system is guaranteed.

- Anti-static wheels are only on FOX ZONE 15 and FOX ZONE 22 machine models, so be sure of the correct connection to the grounding system
- Check for proper connection to the power grid.
- Use only vacuum cleaners with mains connection cables in perfect condition (there is a danger of electric shock if the cable is damaged!).
- Regularly check for damage and signs of wear and tear, cracking or aging of the grid connection cable.

#### **WARNING!**

#### **During operation, avoid:**

- Step on, crush, pull or damage the mains connection cable.
- Disconnect the cable from the mains only by pulling the plug (do not pull the cable itself).
- When replacing the power supply cord, replace it with one of the same type as the original one installed; the same requirement applies if an extension cord is used.
- The power cord must be replaced by the manufacturer's Service Department or equivalent qualified personnel

#### **WARNING!**

#### Avoid to:

- Remove the vacuum breaker valve
- Remove the filter mounted on the vacuum breaker valve.



## **CAUTION!**

#### It is absolutely forbidden:

- · Use of this vacuum cleaner by persons who are not of adult age and properly trained.
- Making the electrical connection to a network without an efficient grounding.
- The use outdoors in the presence of atmospheric precipitation.
- The use of the vacuum cleaner in the absence of the appropriate lock placed on the swivel wheel during vacuuming operations.
- The use of the vacuum cleaner placed on unlevel and non-horizontal surfaces.
- · The use in corrosive environments
- The Use of non-antistatic hoses in the mass (anti-staticity is not allowed only superficial). The use of original DEPURECO accessories is recommended. Check with an ohmmeter for electrical continuity:
  - 1. between nozzle and terminal part of suction accessories: the resistance detected must be less than  $100M\Omega$
  - 2. between the receptacle and the plug (ground pin) in the case of electric machine, or between the receptacle and grounding wire (supplied) in the case of compressed air models. The resistance detected must be: less than 10  $\Omega$
- The use of the machine in working environments that are not classified according to the information on the machine nameplate
- · Vacuum the following materials:
  - 1. Burning materials (embers, hot ashes, lit cigarettes, etc.).
  - 2. Open flames.
  - 3. Combustible gases.
  - 4. Flammable, combustible, aggressive liquids (gasoline, solvents, acids, alkaline solutions, etc.).
  - 5. Explosive and spontaneously igniting dusts/substances and/or mixtures thereof (magnesium or aluminum dusts, etc.). Manomettere o modificare la valvola limitatrice impostata dal costruttore
  - Performing maintenance on the industrial vacuum cleaner in ATEX classified areas
  - Perform maintenance on the vacuum cleaner without first turning off the machine and disconnecting the electrical plug from the outlet
  - Keeping foreign materials such as debris, oil, tools and other objects inside the container that could damage operation and cause personal injury.
  - Using flammable or toxic solvents such as gasoline, benzene, ether and alcohol for cleaning.
  - The use without the filter unit provided by the manufacturer.
  - The use of the industrial vacuum cleaner in the absence of safety devices.
  - Wearing unfastened or dangling clothing such as ties, scarves, torn clothing that can snag or be sucked up by the vacuum cleaner. Aprire il contenitore con l'aspiratore in funzione.



- Open the container in the area classified as potentially explosive
- Add extension lines, plug-in connection devices and adapters.
- · Step on the vacuum cleaner.
- Touch electrical wires, switches, buttons, etc. with wet hands.
- Touch, while using the industrial vacuum cleaner, some components (motor terminal board, motor housing in particular) that could reach high temperatures.

#### **WARNING!**



This vacuum cleaner may contain dust harmful to health.

Emptying and maintenance procedures, including disposal of dust collection containers, should be carried out only by trained personnel wearing appropriate protective equipment.

This manual should always be available for reference on the planned operating cycle and whenever there is any doubt.

If it is lost or damaged, a replacement copy should be requested from DEPURECO.

#### 2.3 Safety plates and symbols

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

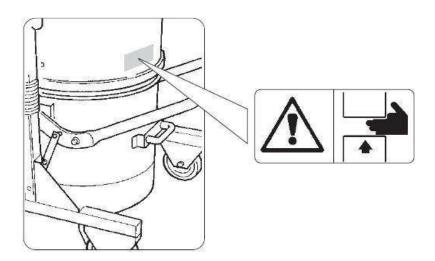


#### Warning!

Ensure that all safety messages are perfectly legible.

Clean them using a cloth with water and soap. Do not use solvents, naphtha or petrol. Request replacements for damaged plates from DEPURECO.

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







#### Warning!

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

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

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



#### Warning!

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





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

#### 2.4 Residual risks

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

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

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

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

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

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

#### Risks related to operation in humid environments

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

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

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

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



#### Warning!

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

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



#### 2.5 ATEX safety instructions



Ex Hexagon - ATEX Directive 2014/34/EU

In this manual the Ex hexagon is next to the main safety instructions concerning the risk of explosion.

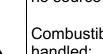


All staff involved in the installation, use and maintenance of the appliance and its components should receive technical training for the tasks to be carried out, particularly for working in areas with a potentially explosive atmosphere. Any changes made to this appliance may invalidate its safety features. Always follow the manufacturer's instructions.



ZONE 22: area in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

It is forbidden to use the appliance in areas classified as ZONE 0, 1 or 2 due to the presence of gas.



The appliance is only suitable for working with dusts that have no source of ignition.





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

It is forbidden to use the appliance with hybrid, explosive and St3 class dust mixtures, chemically unstable dusts.



The user must ensure that the appliances are used according to their intended use, namely that they are used in ZONES classified as compatible with those for which said appliances are declared suitable by the manufacturer.

The appliance is designed to work in standard environmental conditions:

- Temperature -15°C ≤ Tamb ≤ +40°C.
- Atmospheric pressure +0.8/1.1 bar

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





Any electrical or mechanical components to be installed on the equipment must be certified of a category suitable for use:

category 3D (ZONE 22)

For maintenance or cleaning operations, the user must ensure that the equipment used (vacuum cleaners, portable lamps, etc.) is of a category suitable for the environment:

category 3D (ZONE 22)

#### **INSTALLATION - START-UP**

Before installation and start-up, visually inspect the appliance for any transport damages.

The tools used for installation must comply with **EN 1127-1** in relation to the area of use.

As a preliminary operation, provide earthing and check that it works properly. Earthing is visually indicated by a symbol in accordance with European standards.

Carry out the following checks during Start-up:

- check that the appliance is correctly earthed and there is equipotential bonding between the various parts of the appliance, particularly the moving parts;
- carry out a blank test with sound check (abnormal noise): if there are any problems, stop the appliance and check that the moving parts are assembled correctly;
- the electrical wiring must be done by qualified staff and in accordance with the wiring diagram.

While testing and delivering the appliance, appropriate training must be provided to the operator installing, starting and using the appliance under normal conditions.



The user must ensure that the plant in which the appliance is to be installed has been adequately safeguarded against explosion before being started and that the "Explosion protection document" has been prepared as required by ATEX Directive 1999/92/EC (Italian Ministerial Decree 81-2008).



# IT IS FORBIDDEN TO INTRODUCE (VACUUM) IGNITION SOURCES FROM

**OUTSIDE**, including those resulting from self-ignition of dust or embers.





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

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



A periodic check must be carried out, especially after maintenance operations, of the equipotential bonding conditions between the different metal parts of the appliance, particularly the moving parts and the filter cages.



Strictly use antistatic/dissipative components that ensure electrical continuity



The installation, assembly and disassembly operations must be carried out on machines switched off and in the absence of a potentially explosive atmosphere.



The installer must check that the process specifications match the appliance characteristics given on the plate (e.g. with reference to the maximum surface temperature).

The appliance must not be used to vacuum material with incompatible product characteristics.



The manuals for the ATEX components fitted on the appliance are enclosed: the user must observe all safety instructions relating to use of these components.



The appliance must be cleaned by the user to prevent the formation of combustible dust.

Do not use compressed air to clean the layers of dust, but use appropriate vacuuming systems for handling potentially explosive dust (ATEX certified vacuum cleaners).





A specially trained operator must always be present when the appliance is being used and must intervene immediately, by stopping the equipment with the emergency button (where applicable) or the emergency disconnector switch, in the event of malfunctions, such as abnormal noise (breakage of components), clogging of the inlet and outlet pipes, breakage of the filter bags, suction of material containing foreign bodies or sources of ignition.



For installation and maintenance of electrical parts (e.g. cables, cable glands and terminals), always follow the guidelines given in EN 60079-14.

When opening junction boxes (for inspections), make sure that the gaskets are in place when closing them again.



The plug is not ATEX certified (or is not supplied): the user must either connect the plug to a socket installed in a SAFE AREA or fit an ATEX plug.



The hoses, suction nozzles and filter bags are antistatic as declared by their respective manufacturers.

It is forbidden to use other types of components.



The building where the appliance is used must have a lightning protection system.



There must not be any sources of ignition close to the appliance, for example:

- flames;
- embers:
- hot surfaces:
- sparks (e.g. from metal cutting);
- stray currents and cathodic protection systems;
- electrical or mechanical equipment that is not ATEX certified;
- electrostatic charges carried by operators or portable equipment;
- radio frequencies (RF) and electromagnetic waves (from 10<sup>4</sup>Hz to 3\*10<sup>11</sup>Hz);
- electromagnetic waves (from 3x10<sup>11</sup>Hz to 3x10<sup>15</sup>Hz);
- ionising radiation;
- ultrasound.

Nelle immediate vic presenti fonti di inne

- fiamme;
- braci;
- superfici calde:
- scintille (per es. pr
- correnti vaganti e
- apparecchiature e
- cariche elettrostati apparecchiature mo
- radio frequenze (F 3\*10<sup>11</sup>Hz);
- onde elettromagne
- radiazioni ionizzar
- ultrasuoni.

#### 2.6 Directives applied

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

- 2006/42/EC Machinery Directive
- 2014/30/EU Electromagnetic Compatibility Directive
- 2011/65/EU ROHS Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment
- 2014/35/EU Low Voltage Directive
- 2014/34/EU ATEX Directive

Regulatory references, including mandatory requirements, are managed in the Quality Management System and filed with DEPURECO



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

#### 3.1 Handling

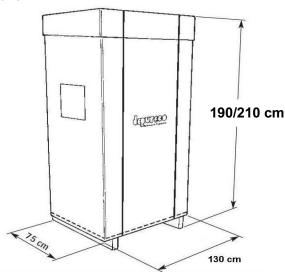


#### Warning!

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

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

Dimensions of packed vacuum cleaner:





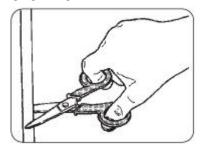
The vacuum cleaner must be lifted and handled exclusively using a forklift having suitable load bearing capacity.

When using a forklift, lift the load 200 mm off the ground and swing backwards. Always keep the height of the working environment in mind when lifting loads.

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

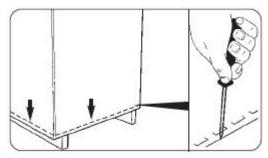
#### 3.2 Unpacking

- Cut and unwind the two packaging fixing belts





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

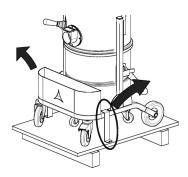


- remove the carton completely





- Unscrew and remove the screws and fixing brackets from both sides





The cardboard packaging is recyclable. In order not to create environmental impacts, it is recommended that it be given to separate collection.



Warning. Store the pallet.

For possible later transport, the vacuum cleaner should be anchored to the pallet using a similar locking system.

#### 3.3 Installation



#### Caution

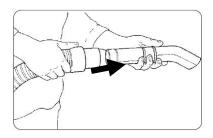
Before installing the vacuum, it is important to carry out a thorough preventive visual inspection to identify any damage which may have occurred during transport.

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

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

Insert the hose equipped with a sleeve in the special suction inlet and make sure it has been securely attached to it

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

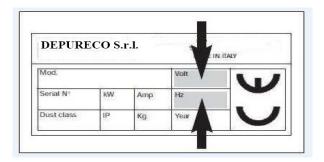




Note: the flexible tube and the relevant end-pieces and accessories are not included with the STANDARD model. Contact your dealer (or DEPURECO) for information regarding the various types of OPTIONALS that can be used on this specific model.

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

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



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

Insert the plug (standard supply) into the socket.



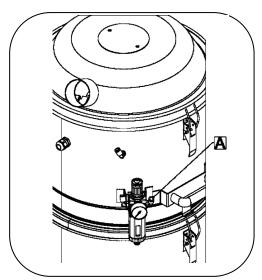
#### Warning!

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

#### Connection to air supply -

(only for vacuum cleaners equipped with the counter-current air system)

Connect to the connection (A) shown in the figure. The required pneumatic supply is max. 6 bar. To ensure proper operation, the air fed into the vacuum cleaner, must be de-oiled.





#### 4. OPERATION SECTION

#### 4.1 Description of the controls



#### Attention!

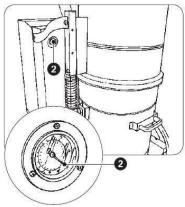
Only authorised staff who have read these use and maintenance instructions are allowed to use the vacuum cleaner.



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

- 1. ON-OFF switch
- 2. Vacuum gauge: indicates filter clogging.







#### 4.2 Operation cycle

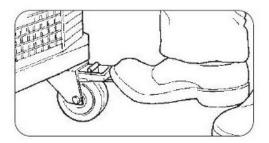
Ensure that the power cord is intact and in perfect state.



#### Warning!

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

- Ensure that the power plug is inserted into the socket correctly.
- Make sure the flexible hose is properly inserted and tightened on the special inlet.
- Ensure that the dirt collecting container is in the proper position and locked in place under the vacuum's chamber
- Secure the vacuum cleaner using the brake on the rotating wheel, as shown in the figure.





Caution.

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

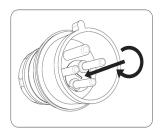
Hold the end of the flexible hose with the chosen vacuum accessory.

To start using the vacuum cleaner turn the switch (1) to "I",

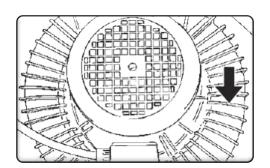
To interrupt the vacuuming turn the switch (1) to "0".

In case that, after turning switch (1) to "I", the machine does not suck but blows it means that the power phases of the plug are wrong.

To reset the power phases, turn switch (1) to "O," unplug the plug from the power outlet, insert a screwdriver into the notch inside the power plug and reverse two poles with a rotation of 180



For further verification that the vacuum cleaner is working properly, in addition to checking the actual suction, make sure that the direction of rotation of the pump is as shown in the figure below





#### Caution!

Before switching on again the vacuum cleaner, ensure the pump has come to a complete stop.

When the work is finished, turn the main switch (1) to "0".

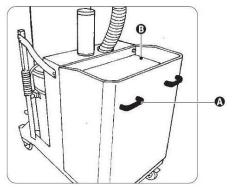


#### Caution!

If dust escapes from silencer, the filter may have broken in this case, the vacuum cleaner should be stopped immediately and the cause should be checked.

For each emergency, turn the main switch (1) to "0"

To move the vacuum cleaner, use the appropriate handles (A) - see figure





Caution!

During operation, prevent the flexible hose from rolling up or kinking.

There is a vacuum gauge on the side of the vacuum cleaner that indicates the degree of depression inside the vacuum cleaner. The vacuum gauge alerts the operator to the condition of the filter: increasing depression indicates increased filter clogging, resulting in reduced suction power.



When the filter is clogged, the vacuum gauge shows the value given in the table.

Туре	Clogged filter value			
TX 300	-0.40 bar	-40 kPa		
TX 400 P	-0,36 bar	-36 kPa		
TX 400 S	-0.13bar	-13 kPa		
TX 550 P	-0,41 bar	-41 kPa		
TX 550 S	-0,21 bar	-21 kPa		
TX 750	-0,25 bar	-25 kPa		

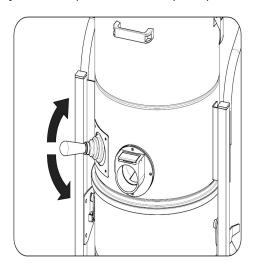


#### Caution!

Do not use the vacuum cleaner with the filter clogged

Proceed as follows to clean the filter:

- Switch the vacuum off
- Wait for the pump to come to a complete stop
- Lift and lower vigorously the lever (detail no. 3, chap. 1.1) to shake the inner filter





#### Caution!

If the vacuum gauge still indicates uneven vacuum, the hose or suction accessory may be clogged. In this case it should be cleaned by removing the cause of the clogging.

#### Vacuum cleaner with counter-current air (S.P.) cleaning system.

The vacuum cleaner must be connected to compressed air with a maximum pressure of 6 bar, to the appropriate filter regulator.

Cleaning of the filter cartridges will be done automatically during the vacuum work.



#### Warning!

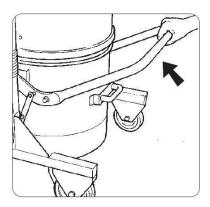
If the vacuum cleaner is not working properly, after cleaning the filter, the filter may be clogged and need to be replaced.

#### 4.3 Emptying the container

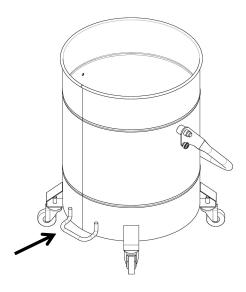
Depending on the type and quantity of material being vacuumed, it is necessary to check periodically the dirt container to avoid filling it excessively.

Proceed as follows to empty the container:

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



In order to facilitate the emptying of the container, and you can use the special handle on the bottom of the container





- Empty the debris into the container designated for waste disposal

If a plastic bag is used for debris collection, proceed as follows for replacement:

- After removing the container tie the bag, pull it out and insert a new bag









#### Caution.

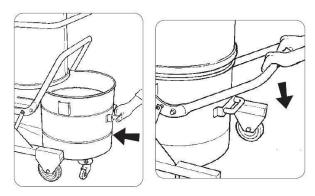
If the container or bag weighs more than 15 kg, you will need to get help from at least one other person.

Waste disposal must be in accordance with the laws in force in the country of use of the vacuum cleaner - for Italy Legislative Decree 152/2006 as amended.

#### 4.4 Inserting and locking the dirt container

Follow the steps below to insert and lock the container:

- as previously mentioned, lock the vacuum cleaner by means of the lever located on the swivelling wheel
- lock the container under the filter chamber by lowering the special handle and make sure it has got locked properly





Warning!
Danger of crushing upper limbs!
Never insert hands between the container and the vacuum cleaner during the clamping operation



### 4.5 Storage - decommissioning

Remove the filter and clean it, empty the debris container or remove the part of the bag with debris, and store the vacuum cleaner in a place sheltered from the weather with temperatures between 0°and 40°C, covering it with a nylon cloth so as to prevent dust accumulation.



#### 5. MAINTENANCE SECTION



#### Warning!

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

#### 5.1 Informative notes

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

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

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

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

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

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

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



#### **CAUTION!**

Periodically it is necessary to open and clean the pump housing, preferably by means of a vacuum system or by using a wet cloth.

It is preferable, when possible, to do this by transferring the vacuum cleaner to a safe area

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

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

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



#### 5.2 General safety regulations



#### Warning!

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



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

Place a sign on the vacuum with the message:

"MACHINE UNDER MAINTENANCE DO NOT START"



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

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

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

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

- Mechanical maintenance
- Electrical maintenance

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

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

- Keep unauthorised personnel out of the work area.









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

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

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



#### Warning!

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

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

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



#### Warning!

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

#### Before every work shift

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





# Warning!

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

# 5.3 Replacing the filter

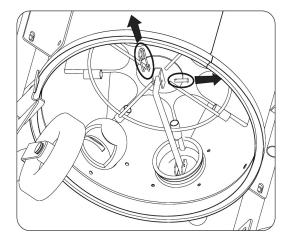


#### Warning!

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

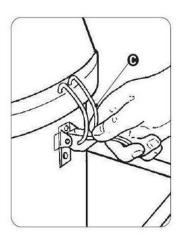
Proceed as follows to replace the filter:

- Switch the vacuum off by positioning the main switch to "O"
- Disconnect the vacuum cleaner from the power socket
- Disconnect the C.C.A. cleaning system (if provided) from the power supply (by switching of the related connector) and from the compressed air supply.
- Remove the container
- From the lower side of the filter chamber, release the clip and remove the retaining pin of the cage from the filter shaking lever



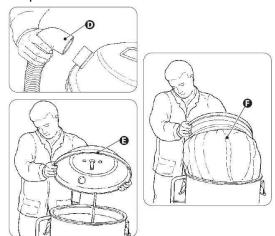


- Unlock from both sides the two locking hooks (C)

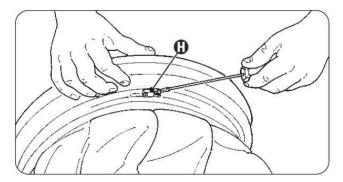


Disconnect the suction tube (D) by unscrewing the clamp with appropriate hex wrench

- Remove the cap (E)
- Remove filter H and/or cleaning system C.C.A (where provided).
- Slide off the filter (F) and place it on a workbench.



 Loosen the fastening clip (H), remove the filter from its support and, using scissors, cut the lower belts that clamp it to the shaking cage





When replacing the filter, make sure that the equipotential bonding braid is properly connected



# Remove the filter, place it inside a plastic bag, close it and dispose of it according to current laws for the type of material sucked in



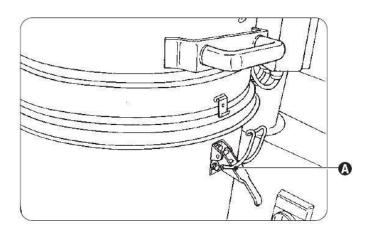
#### To reassemble the filter, operate in reverse order:

- Insert the new filter in the support ring and lock it by means of the fastening clip (H)
- lock the filter to the cage by tying the special laces on the bottom side
- insert the filter with ring and cage inside the filtering chamber, paying particular attention to align the cage to the filter shaking lever
- insert the lever end into the appropriate seat on the bottom of the cage and then insert the fastening clip
- place the H filter and/or the C.C.A cleaning system (if envisaged) on the filter top
- position the vacuum cleaner cup, insert the suction tube to the cap and tighten the fastening clip. Then lock the cap with the appropriate locking hooks
- Connect the C.C.A. cleaning system to the compressed air supply and to the power supply (by connecting the related connector)
- lock the dirt container under the filter chamber
- connect the vacuum cleaner to the mains
- turn on the vacuum cleaner, immediately assessing its efficient operation.

### 5.4 Replacing the filter cartridges on the C.C.A. cleaning system

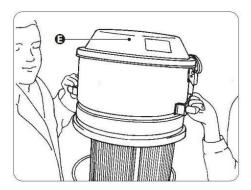
Follow the indications below to replace the filter cartridges of the C.C.A. cleaning system:

- Switch the vacuum off by positioning the main switch to "O"
- Disconnect the vacuum cleaner from the power socket
- Disconnect the C.C.A. cleaning system from the power (by disconnecting the related connector) and the compressed air mains
- Disconnect the suction pipe from the intake cap by loosening the fastening clip (A)

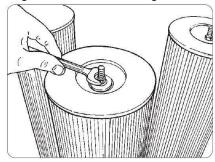




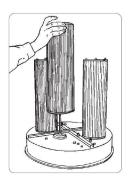
- Remove the cap
- Unlock the locking hooks and raise up the vacuum cleaner cover
- Unlock and remove the H filter (if provided)
- Unlock the locking hooks of the C.C.A. cleaning system and pull it up along with another person from the filtering chamber, turn it over and place it on a work bench



- Remove and unscrew the fastening nuts from the cartridges base



- Slip out and replace the filter cartridges





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



- Insert the new cartridges and tighten the fastening nuts, make sure they have been properly mounted
- Helped by a second person, place the C.C.A. on the filter chamber and lock it with the locking hooks
- position the H filter (if provided) and lock it by means of the locking hooks
- position the vacuum cleaner cup, insert the suction tube to the cap and tighten the fastening clip. Then lock the cap with the appropriate locking hooks
- Connect the C.C.A. cleaning system to the compressed air supply and to the power supply (by connecting the related connector)
- Connect the vacuum cleaner to the mains
- Switch the vacuum cleaner on by positioning the main switch to "I", then check to make sure it works properly.

# 5.5 Sostituzione della cartuccia HEPA (dove previsto)

The H filter (absolute filter fo) allows retaining almost 100% of the dust. The filtration capacity of the vacuum cleaner equipped with this type of filter must be periodically checked.

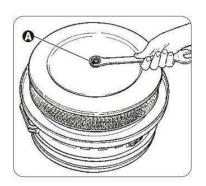


#### Warning!

On replacing the H filter, wear suitable PPE (breathing mask, goggles, rubber gloves, etc.)

Proceed as follows to replace the filter:

- Switch the vacuum off by positioning the main switch to "O"
- Disconnect the vacuum cleaner from the power socket
- Disconnect the suction pipe from the suction cap by loosening the strap
- Remove the cap
- Remove the H filter and lay it on a work bench. Then unscrew the filter fastening screw (A)





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



# To refit the HEPA cartridges, work backward:

- Fit the new filter and screw it onto the holding strip by means of the screw (A) previously removed
- Reposition the H filter on the filter chamber and lock it with the appropriate locking hooks
- position the vacuum cleaner cup, insert the suction tube to the cap and tighten the fastening clip. Then lock the cap with the appropriate locking hooks
- Connect the vacuum cleaner to the mains
- Switch the vacuum cleaner on by positioning the main switch to "I", then check to make sure it works properly.

**USE EXCLUSIVELY FILTERS MANUFACTURED BY DEPURECO** 



# 5.6 Troubleshooting

FAULT DETECTED	POSSIBLE CAUSE	SOLUTION RECOMMENDED
The vacuum cleaner will not start	- No power supply Switch	<ul> <li>Check for the presence of voltage in the socket</li> <li>Check the condition of the plug and the power cable</li> </ul>
	- circuit breaker tripped	<ul> <li>Reset the magneto-thermal switch</li> <li>Contact DEPURECO technical assistance</li> </ul>
Irregular suction	- Clogged filters	Clean any clogged filters. If this solution is not effective, replace it.
	- Clogged suction tube	- Check suction tube and clean it.
Excessive noise from motor	- Faulty pump	- Contact DEPURECO technical assistance

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# 5.7 Scrapping

This product falls under the scope of Directive 2012/19/EU on the management of waste electrical and electronic equipment (WEEE). The equipment should not be disposed of with household waste as it is composed of different materials that can be recycled at the appropriate facilities. Inquire through the municipal authority regarding the location of ecological platforms suitable to receive the product for disposal and its subsequent proper recycling. Please also note that upon purchase of equivalent equipment, the distributor is required to take back the product for disposal free of charge. The product is not potentially hazardous to human health and the environment, as it does not contain harmful substances such as Directive 011/65/EU (RoHS), but if abandoned in the environment it will negatively impact the ecosystem. Please read the instructions carefully before using the device for the first time. Absolutely do not use the product for other than its intended use, as there is a danger of electric shock if used improperly. Il simbolo del bidone barrato



presente sull'etichetta posta sull'apparecchio, indica la rispondenza di tale prodotto alla normativa relativa ai rifiuti di apparecchiature elettriche ed elettroniche. L'abbandono nell'ambiente dell'apparecchiatura o lo smaltimento abusivo della stessa sono puniti dalla legge.

REGISTRATION IN THE WEEE REGISTER N. IT18090000010711



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



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

Fax +39 011 98.59.326

INTERVENTION 3:	DATE:
TECHNICAL ASSISTANCE:	
TYPE OF INTERVENTION:	
INTERVENTION 4:	DATE:
TECHNICAL ASSISTANCE:	

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