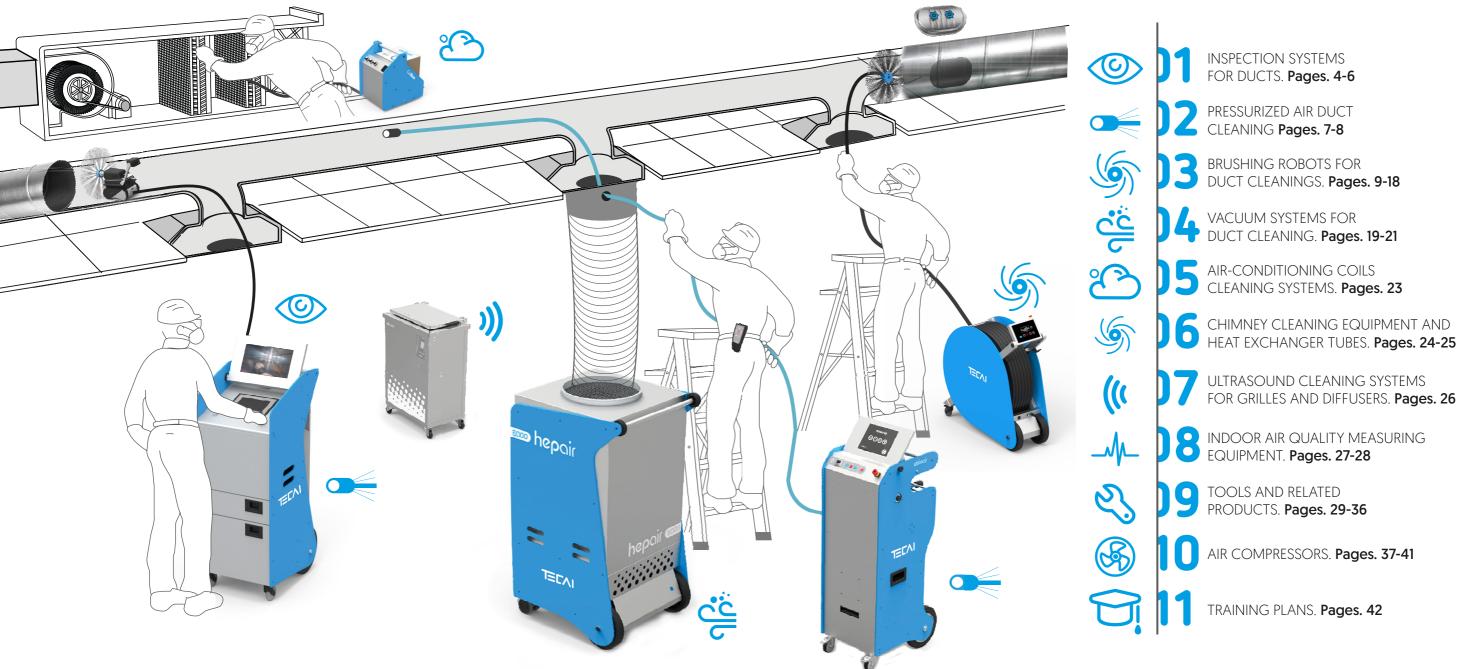




index





YOU CAN BE A HEALTHY INDOOR SUPPLIER

The ducts for ventilation and air-conditioning can accumulate large quantities of dirt, and are ideal places for aerobic organisms and mold to grow, leading to more than 38% of absences due to sickness and illnesses caused by respiratory conditions. The sanitation of these systems offers great advantages to your clients, such as:

- ▼ Guaranteeing the health of your on-site personnel.
- **▼** Savings in maintenance and energy costs.
- **∨**Compliance with the law.

REASONS FOR STARTING THIS BUSINESS



THE MARKET

How many office buildings, official centers, hospitals, schools, public and private companies in your country? According to the census of the National Institute of Statistics there are more than two million non-residential residential buildings in Spain. This enormous market demands services related to services related to CAI (Indoor Air Quality) Indoor Air Quality) for compliance with existing regulations, with respect to the improvement performance of their facilities. and concern for the health concern for the health of building occupants. With only 1% of this market in Spain, its customer base would amount to some 20,000 buildings.



THE MARKET

More and more countries are implementing regulations governing the cleaning and periodic maintenance of air conditioning systems. In Spain, RD 238 /2013, which amends the Regulation of Thermal Installations (RITE), requires, in its maintenance plans for buildings of over 70 kW, to perform an analysis of the entire air conditioning system based on the UNE 100 012 standard, which establishes the parameters for sanitization and disinfection.



THE BUSINESS

After studying this data, we can clearly state that the business of cleaning air-conditioning systems is in a phase of full expansion. the installations, and which can incorporate the This represents an opportunity for both companies who want to expand or diversify equipment adapted to the nature and scale of their business activities. These services can be approached with different configurations of entrepreneurs and cleaning or maintenance latest technical innovations.

visiobot

Cleaning and inspecting air duct robotultra portable

As indicated by the various regulations, inspection before and after air duct cleaning work is mandatory. This is why Visiobot is your ideal complement. Its stainless steel structure makes it resistant to shocks and falls. It has a Non-Stop technology, because thanks to its integrated battery, it will allow you to work autonomously for more than 2 hours in the video inspection of air ducts. It also has a practical battery charge indicator to know its level at all times.

















APPLICATIONS \











The latest technology in visualization and recording of the images collected by Visiobot. It has High resolution Easy Touch screen, captures video and HD images, with text insertion, date and time of recording, playback of the recordings on the spot. Easy to use interface, large internal memory.

OPTIONAL ACCESSORIES



LITHIUM IRON BATTERY VISIOBOT 5.5 Ah

AC3303405



Transport system with trolley integrated in the control box. attached suitcase for housing the traction and cables.

Integrated battery	12 V - 5,5 Ah
Traction	By means of a hi- gh-grip strap
Cameras Front rear	High resolution colour
Lighting	1 LED ring in front and 2 rear LED banks with variable brightness
Material	Stainless steel and HDPE
Hose length	20 metres
Tractor dimensions [L x A x Al]	225 x 110 x 135 mm 8.8 x 4.3 x 1.4 inch
Dimensions(L x A x AI)	745 x 415 x 175 mm 29.3 x 16.3 x 6.9 inch
Tractor weight. Total weight of equipment	2,4 kg 5.2 lb 18 kg 39,6 lb

visiomax

Portable video inspection system for air-conditioning ducts

It is the video inspection tool prior to any cleaning intervention of air-conditioning ducts, to convince your customers of the need to clean their ducts.

It is a compact and portable system.









Ø 30 to 400 mm

Chimneys [

Ducts

Exchanger tubes

Scratch-resistant, waterproof, sapphire crystal LCD camera



Rechargeable

1000 mm

800 x 480 RGB

7" TFT-LCD Color

12 white LEDs of

Submersible to 20 m

adjustable brightness

517 x 434 x 200 mm

20.3 x 17 x 7.9 inch

140°

in water

8 hours

7-9 hours

30 meters

14 kg / 31 lb

LI-ION type 9-12 V

1/3" Sony CCD Ø22mm

with sapphire crystal lens

TECHNICAL FEATURES

Power supply

Camera features

Viewing range

Camera angle of vision

Image resolution

Sealing (Camera)

llumination

Charging time

Battery duration

Camera cable length

Dimensions (L x W x H)

Monitor

STANDARD EQUIPMENT



CHARGERS

CENTRATOR







LI-ION BATTERY

WIRELESS REMOTE CONTROL











Weight

visionano

Ultra-portable video inspection system

VISIONANO is an ultra portable and ultra light system It weighs only 530 g!, to be used as a commercial tool, for carrying out punctual, short-range inspections of ventilation system ducts. Often what is not seen or can not be demonstrated, is the barrier that postpones a work always necessary, when we talk about cleaning ducts in air conditioning systems. It has a maximum range of 4 meters.



Camera resolution 704 x 576 [PAL]



Includes case for transportation



OPTIONAL ACCESSORIES V



EXTENSION FOR CAMARA OF 1m

AC3303404



640 x 480 px LCD screen resolution

amera resolution	704 x 576 (PAL)
creen resolution	640 x 480
owered	4 batteries AA
ealing (camera only)	IP-67
CD screen	3,5" TFT-LCD
xternal power supply	5 V
Charging time	3 h
attery life	2 h
ength of flexible shaft	1 m (extendable up to 4 m)
vimensions	256 x 95 x 153 mm (without flexible shaft)
Veight	530g

visioair

Duct Cleaning equipment with pressurized air

By means of the air injection system, it drags the dirt adhered to the ducts at the same time that displays, records and verifies the cleaning, through a micro camera on the intelligent head. With its perimeter cleaning technology, it goes through everything the duct, disincrusting all the dust particles and dirt. No matter what size, shape or material of the duct, the intelligent nozzles adapt to all situations.













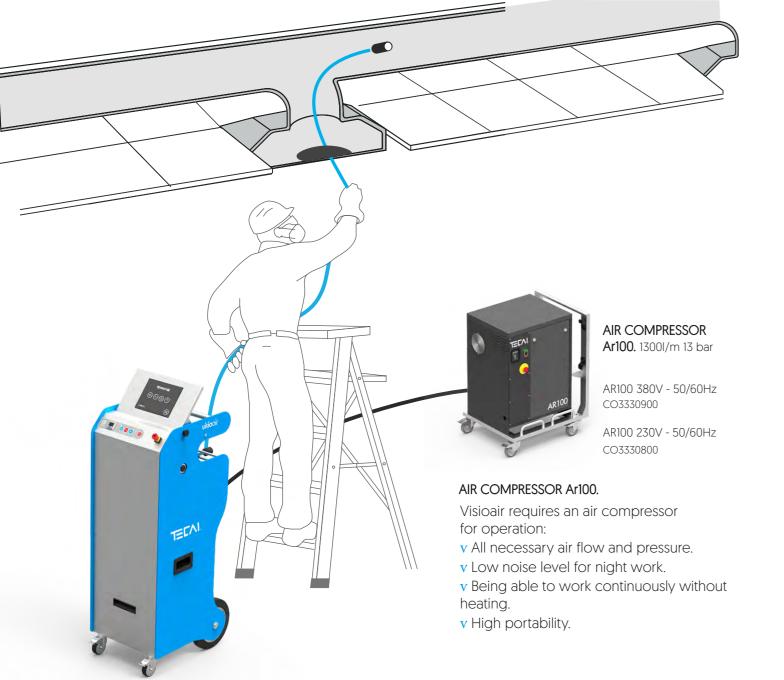


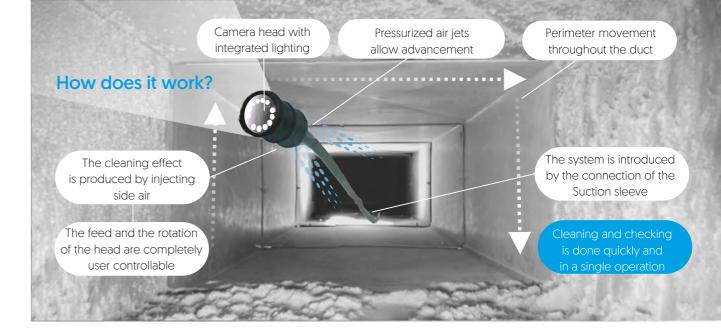


Fiber duct

Square duct







OPTIONAL ACCESSORIES



REMOTE CONTROL ERGONOMIC RF

AC3303122



AIR HOSE FLAT OROFLEX. 30 m

AC3101207

Power supply	220 V - 50Hz 110 V - 60 Hz
Compressed air supply	800 litres/min (smart nozzle) 28.25 cfm
	800 litres/min (rotating nozzle) 28.25 cfm
Control	Manual electric-pneumatic with remote control
Sound level	< 70 dB
Hose length 8 (x2)	15 meters
/ideo inspection system	HD Camera
Body material	Stainless steel
oimensions (L x W x H)	550 x 410 x 1190 mm 22 x 16,14 x 47 inches
Veight	45 kg 99 lb

multibot

THE FUTURE OF AIR DUCT CLEANING IS NOW

One robot for multiple tasks

This multitask robot will allow you to carry out multiple applications, coupling different modules for cleaning, disinfection and coating inside the air ducts. It incorporates the latest technologies such as FullHD cameras, automatic module elevation system, HMI touch screen control panel, and HD recording system.



multibot



Multibot makes use of robotised platforms where different modules can be connected, making it suitable for any air duct cleaning task, as well as modules with different cleaning, disinfection and sealing settings.

It reaches the top

Thanks to the automated elevation system offered by the robotised **Max** platform, it is possible to clean large air ducts of up to 1000mm. The height regulation adapts itself from the control unit as the robot moves.

Versatile

The Multibot's powerful traction crawler allows you to move over any surface and climb slopes of 30° inclination.

The robot and the application modules are designed to clean any size of circular or square duct and for any size.

Robust and reliable

Built with the most resistant materials, such as stainless steel in the structure and and the dense polyamide in the casing.

The heart of Multibot are its powerful engines of last generation, which assures us a long duration and reliability.

Nicely-sharp images

The last technology in visualization and recording of the images collected by Multibot in Full HD 1080P. It has a high resolution monitor for recording and storage of videos and photographs, with a touch screen resistant to dust and water.







Reach the furthest

With the robotised **MAX** platform, it is possible to clean, disinfect and seal air ducts between 400 mm and 1000 mm. This is because, thanks to the modules' automated elevation system, the height regulation adapts itself to the air ducts size from the control unit as the robot moves.

Arm for height and angle adjustment of the display module

1.000 mm

400 mm

Platform for coupling the application modules

aucunu.

Traction system by caterpillar wheels

Front-lighting spotlights

TECHNICAL CHARACTERISTICS

Dimensions and weight (excluding modules)	L x A x Al : 320 x 200 x 250 mm / 11 kg L x W x H : 12.6 x 7.8 x 9.8 inch / 24.2 lb
Structural material	Stainless steel and polyamide (PA12)
Cameras (front and back)	Full Colour HD 1080P
Lighting	High intensity LED 4000 K 360°

Communication Connection of the application module

Rear view camera

Communication Connection with the control unit



Compact design

With the robotised **MICRO** platform, it is possible to clean, disinfect and coat the smallest air ducts between 250 mm and 500 mm, small outside and large inside. It integrates all the same advanced technology as it's big brother, the **MAX** robot, in order to carry out any task using the Multibot system's available modules.





TECHNICAL CHARACTERISTICS

Dimensions and weight
without module

L x A x AI : 283 x 198 x 112 mm / 5,5 kg
L x W x H : 11 x 7.8 x 4.4 inch / 12.1 lb

Structural material

Stainless steel and polyamide (PA12)

Cameras (front and back)

Color Full HD 1080P

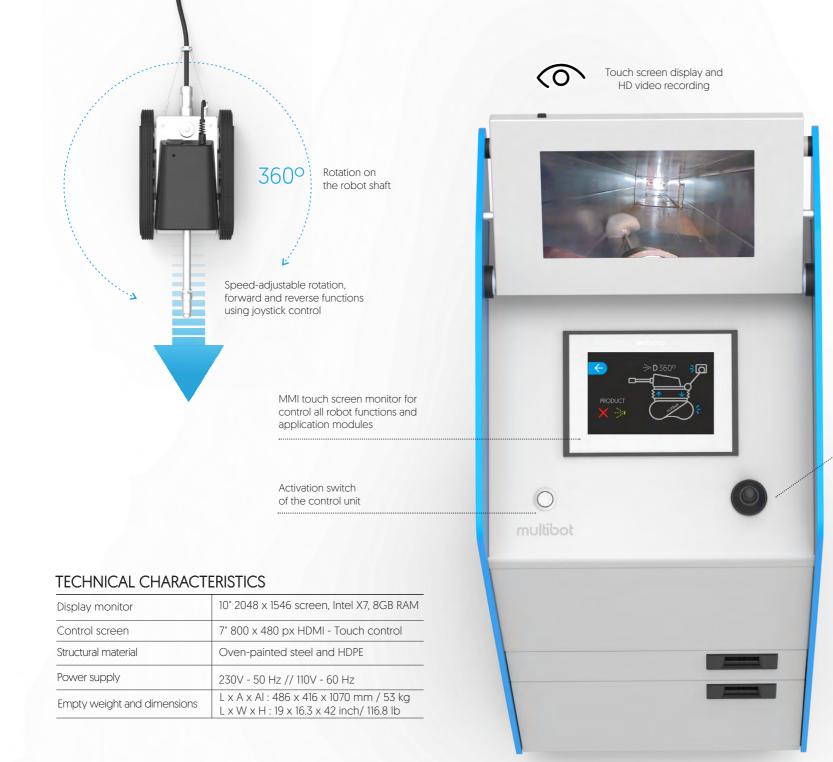
Lighting (front and back)

High intensity LED 4000 K 360°

MICRO AC3120629



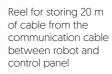




Removable box for storage the application modules

Removable box to store the robotised platform

Joystick for control the direction and speed of the tractor unit





SINCES APPS

Quick Connect

Easy and fast connection between the robot's modules without the need for tools, fast connection between cable and plug.



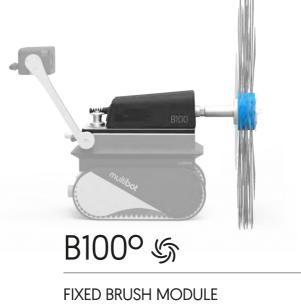
The Multibot's modular concept is made up of different modules which carry out different tasks inside air ducts, and all are compatible with the MAX and MICRO robotised platforms, with fast and easy connection.



Hose protector

Protect the robot hose when accesing the duct [Accessory included].













blogic

Pneumatic brushing equipment for air ducts

The system uses compressed air to drive a motor housed in the end of a flexible hose.

The **wrist remote control** allows a single operator to perform the cleaning of the air duct .

It incorporates the function of automating the rotation of the brush. This feature shortens the time required for the cleaning.

Brushes

Different materials and sizes for all types of ductwork.

DUO Square system for effective cleaning in square ducts.

PNEUMATIC

For ducts up to 1000 mm

Length of the flexible shaft



Shows the status of the machine.

25 m

HMI screen

Control all equipment functions.

Shaft guard

Facilitates its take-up and protects it when you are on the move.





$\pmb{\text{VISIOPRO}} \text{ [Optional]}$

Video inspection system that allows you to watch and record while cleaning is being carried out.



The camera is integrated into the hose.

Provides horizontal images at all times, even when the camera is tilted. .

Includes display screen with harness, and carrying case.



OPTIONAL ACCESORIES V



WRIST REMOTE CONTROL AC3303605



The **CENTERING** fixes the brush in the center of the duct.
AC3303133



VISIOPRO. Visualization system, camera harness, camera and carrying case. SV3331032 SV-PRO



ANTI BREAKAGE HOSE PROTECTOR

AC3303112

CONSUMABLES



PACK 5 THICK NYLON BRUSHES. For cleaning ducts with

heavy dirt. Ø200 | 300 | 400 | 500 | 600 mm CP2201015



PACK 5 FINE NYLON BRUSHES.

For maintenance and delicate duct cleaning. Ø200 300 | 400 | 500 | 600 mm



TECHNICAL FEATURES

blogil

	•
Motor power supply [Maximum power]:	220 I/min – 6,3 bar 7,77 cfm – 6,3 bar
No-load rotational speed:	762 rpm
Rotation speed at full power:	379,2 rpm
Torque at max output:	2,5 Nm 22,13 lbf.in
Minimum starting torque:	3,1 Nm 27,44 lbf.in
Stall torque:	5 Nm 44,25 lbf.in
Nivel Noise level::	< 70 dB
Direction of rotation:	Right / Left
Control system:	Electropneumatic
Dimensions:	1162 x 1162 x 430 mm 45,75 x 45,75 x 16,93 inch
Length of the flexible shaft	65 kg 143 lb
Hose length:	25 m 82 ft
Structural material:	Stainless steel and HDPE

rotair

Electric duct cleaning equipment

The perfect equipment for medium sized ducts. It incorporates the exclusive ProAxis technology that prevents breakage of the rotating shaft.

The wrist remote control allows a single operator to perform the cleaning of the air duct.

It incorporates the function of automating the rotation of the **brush**. This feature shortens the time required for the cleaning...

Brushes

With different materials and sizes according to according to the need. Double row brushes for effective cleaning in square ducts.



ELECTRIC SYSTEM

For ducts up to

600 mm

Hose lenght

15 m | With VISIOPRO

VISIOPRO (Optional)

Video inspection system that allows you to watch and record while cleaning is being carried out.



The **camera is integrated** into the hose.

Provides horizontal images at all times, even when the camera is tilted.

Includes display screen with harness, and carrying case.

HMI screen

All control with just one finger



Regulates:

- Direction of rotation.
- Automatic change of the direction of rotation.
- Speed of rotation



OPTIONAL ACCESORIES V



WRIST REMOTE CONTROL

AC3303605



VISIOPRO. Visualization system, camera harness, camera and carrying case. SV3331034 SV-ROT



WRIST REMOTE CONTROL

rotair

Included accessory that allows the equipment to be controlled by a single operator. (Optional).

The **CENTERING** fixes the brush in the center of the duct. AC3101500



ANTI BREAKAGE HOSE **PROTECTOR**

AC3303112

CONSUMABLES V



PACK 5 NYLON SQUARE **DUCT BRUSHES.** Single core and two rows of brushes nance and delicate duct of different sizes. Ø250 | 300 | 350 | 400 | 500 mm

CP2300510



PACK 5 FINE NYLON BRUSHES. For maintecleaning. Ø200 | 250 | 300 | 350 | 400 mm

CP2300505

Power supply	230V / 50Hz - 60Hz 110V / 50Hz - 60Hz
Motor power	370 W max.
Motor rotation speed	0 - 3000 r.p.m.
Operating speed	0 - 500 rpm
Noise level	< 70 dB
Control panel	HMI screen
Direction of rotation	Right Left
Control system	Electric system
Hose length	15 m 49 ft (with VISIOPRO 20 m 66 ft (without VISIOPRC
Structure material	Stainless steel and HDPE
Dimensions (L x H x W)	962 x 365,5 x 992 mm 38 x 14,39 x 39 inches
Weight	60 kg // 132 lb

VOLTAGE	VISIOPRO	HOSE LENGTH	WRIST REMOTE CONTROL	CENTERING	P.V.P. CODE
	Allows the cleaning to be viewed and recorded. No post-purchase installation possible.	Access from your location to the inside of the duct. Allows rotation of the brush	Allows a single operator to control the equipment.	Fix the brush in the centre of the duct. Recommended from Ø400mm	
230W	✓	15 meters	OPTIONAL	OPTIONAL	TC3120416
50/60Hz	×	20 meters	OPTIONAL	OPTIONAL	TC3120412
110W 50/60Hz	✓	15 meters	OPTIONAL	OPCIONAL	TC3120417
•	×	20 meters	OPTIONAL	OPCTIONAL	TC3120413



venet

Ventilation and air-conditioning duct cleaning and extraction equipment



For ducts of

50 to **400** mm

clean small-section ducts.

Hose lenght

10_m

Compact equipment that integrates a cleaning and suction system in the same machine. Cleaning is carried out by means of a mechanical brush with a rotating flexible shaft that allows it to

INCLUDED ACCESSORIES V



VACUUM HOSE. Ø160 mm, 3,33 m of length AC3101319



ADAPTER HOSE DUCT. Ø160 mm AC3101404

AC3303605



FLEXIBLE SHAFT WITH BAG. 10 m. Ø50-250 mm AC3303614



REMOTE CONTROL. Ø250 mm,



NYLON BRUSH. CP4000250

OPTIONAL ACCESSORIES V



F7 AND H13 FILTERS.

400 X 400 X 21.1 unit.

400 X 400 X 46.1 unit.

PACK FINE NYLON BRUSHES. Ø300 | 350 | 400 mm CP2103040



DUCT BRUSHES. Ø300 | 350 | 400 mm CP2104055



PACK NYLON SQUARE FLEXIBLE SHAFT. 15 m. Ø300-400 mm AC3303615

CONSUMABLES V



F7 FILTER. 400 x 400 x 21, x 1 unit AC1300007



H13 HEPA FILTERS. $400 \times 400 \times 46. \times 1$ unit AC1300013



NYLON BRUSH. Ø250 mm, CP4000250



Maximum power equipment:	230V-110V / 50 - 60Hz 0,7 kW // 0,94 HP
Maximum power consumption:	3 A
Suction power:	0,27 kW
Maximum suction flow rate:	1600 m³/h
Maximum depression:	600 Pa
Operating point:	1000m³/h a 450 Pa
Filtration level 1:	F7
Filtration level 2:	H13
Degree of separation:	>99 %
Aspiration hose:	Ø160 mm // 3 m / 9,84 ft
Brushing power	0,25kW
Brushing speed:	Adjustable 0 - 1000 rpm
Direction of rotation:	Right / Left
Control system:	Electric
Control panel:	Membrane keyboard
Brushing shaft:	Ø10 mm // 10 m / 32,8 ft
Noise level:	72 dB
Main materials:	Painted steel and HDPE
Dimensions: [[L x W x H]	530 x 481 x 926 mm 20,87 x 18,94 x 36,46 inche
Weight:	50 kg // 110,2 lb



AIR DUCT
CLEANING
EQUIPMENT



CLEANING SYSTEM

BRUSHED AIR INJECTION



HOSE LENGTH



REMOTE CONTROL

Allows a single operator to control the equipment



SPEED OF CLEANING



DISPLAY

Video inspection system integrated in the equipment.



POWER SUPPLY SYSTEM



DUCT CLEANING



rotair

BRUSHING

With VISIOPRO 15 m Without VISIOPRO 20 m



OPTIONAL



_

>>>> OPTIONAL

+

+

ELECTRIC

De Ø200 a 600 mm √ Squares

√ Circular

√ Coated fiber



proai

BRUSHING

25 m



OPTIONAL



_

OPTIONAL

NEUMATIC (air compressor required). Hasta Ø1000 mm

√Squares

√ Circular √ Coated fiber



visioair

AIR INJECTION: AIRFLOW

15 m



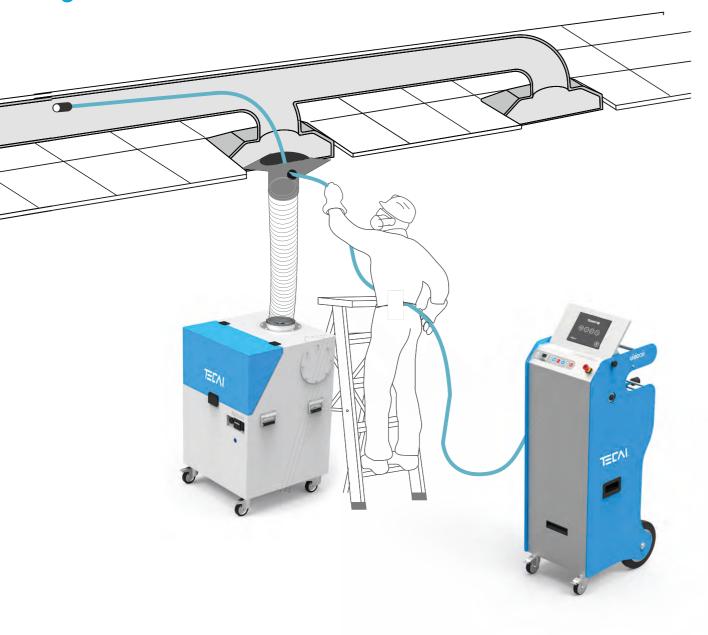
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Cleans, displays and records at the same time. NEUMATIC (air compressor required). De Ø300 a 1000 mm √ Squares

√ CirculaR

√ Coated fiber

DUCT SUCTION SYSTEMS



Suction and triple filtration system for ducts from 200 mm to 800 mm.



COMPARATIVE TABLE OF DUCT SUCTION SYSTEMS

	hepair	hepair
Power supply	230 V / 50 Hz 110 V / 60 Hz	230 V / 50-60 Hz 110 V / 50-60 Hz
Maximum flow rate	2000 m3/h 1177,2 cfm	6200 m3/h 3650 cfm
Maximum depression	2500 Pa 0,36 psi	1300 Pa 0,2 psi
Filtration	Prefilter G4 Bag filter M5 Hepa H13	Filtrer F7 Hepa H13
Power	880 W	1250 W
Noise level	72 dB	80 dB
Dimensions (L x W x H)	611 x 590 x 943 mm 24 x 23 x 37 in	670 x 750 x 1300 mm 26,4 x 29,5 x 51 in
Weight	80 kg / 176 lb	100 kg / 220 lb

hepair2000

Dust aspiration and filtration system

Hepair 2000 offers a triple stage of filtering [G4 + M5 + HEPA H13], which will retain all the particles, choosing them by their thickness with the different modules.

Its compact and robust design with wheels and lateral handles, facilitates a better portability and maneuverability within the facilities.



APPLICATIONS \









SETION

200 to 800 mm Triple filtration: pre-filter G4 + M5 bag

filter + H13 absolute filter



OPTIONAL ACCESSORIES V







from 160 to 290 cm. 2 units.

AC3101308 AC3101303



CONSUMABLES \

THICK PREFILTER G4. 10 units.

AC3101305



BAG FILTER M5.

AC3101306



HEPA13 FILTER.

TECHNICAL FEATURES

hegoir...

ECHNICAL FEATURES	116/2011/2000
Supply voltage	230 V - 50 Hz 110 V - 60 Hz
Naximum vacuum olume	2000 m3/h 1177,2 cfm
Maximum depression	2500 Pa - 0,36 psi
riple filtration 3 F	Prefilter G4 Bag filter M5 HEPA H13 Absolute filter
separation degree	>99%
ngine power	880 W
Noise level	72 dB
Dimensions	611 x 590 x 943 mm 24 x 23 x 37 inches
Veight	80 kg / 176,37 lb

hepair6000

The ultimate solution in negative suction for duct cleaning

This negative pressure vacuum cleaner offers a power of suction of 6200 m³/h of maximum flow, which allows face all jobs no matter how demanding they are. It has an integrated variator to adapt the suction of air at the consumption of the outlet, optimizing thus the power of the equipment. Hepair 6000 is a single phase vacuum cleaner that allows connect to any power outlet. Fast, versatility and power in a single unit. Its design is compact to facilitate its total watertightness. It can be transported both horizontally and vertically, and can be used

for ducts from 300 mm to 1200 mm.lt includes an

acoustic filter clogging indicator to

know when a change is needed.



APLICATIONS \







Easy to transport, both horizontally and vertically



TECHNICAL FEATURES	hepair‱
Supply voltage Electric consumption	230 V / 50-60 Hz 110 V / 50-60 Hz
Max. flow rate	6200 m3/h / 3200 cfm
Flow rate with filter F7	5350 m3/h / 2000 cfm
Flow rate with filter H13	4800 m3/h / 1800 cfm
Max Depression	1300 Pa / 0,2 psi
Filtration level 1	F7
Filtration level 2	H13
Degree of separation	>99%
Engine power	1250 W
Current consumption	5,6 A // 11,2 A

80 dB

670 x 750 x 1300 mm

26,4 x 29,5 x 51,2 inch

80 kg / 176 lb

100 kg / 220 lb

OPTIONAL ACCESSORIES





AC3101314



AC3101315

CONSUMABLES >



BAG FILTER F7

AC3101316

ABSOLUTE FILTER HEPA 13

AC3101317

Extendable from 160 to 290 cm AC3101303



EXPANSION STRUT For suction sleeve.

Sound level

Dimensions

Weight without filters

Weight with filters

tevac

Industrial vacuum cleaner for dust and liquids

The liquid and dust collector is a tool essential in the cleaning of air conditioning systems, extraction and air conditioning systems. Thanks to its aspiration power you will be able to maintain clean and safe working space.

This powerful vacuum cleaner for dust and liquids allows to do the job with great comfort thanks to the long range of your hose and its potability.



APPLICATIONS \





OPTIONAL ACCESSORIES V



HEPA FILTER

AC3101151

STANDARD EQUIPMENT V





TECHNICAL SPECIFICATIONS

Power supply	230-240V / 50-60 Hz
Power	1200 W
Maximum power	1400 W
Airflow	215 (m³/h)
Depression	2400 mm H2O
Sound level	60 dB
Total tank capacity	37
Hose	2,5 m Ø40
Engine stages	Double
Dimensions (L x W x H)	400 x 400 x 740 mm 15.7 x 15.7 x 29 inch
Weight	60 kg 132 lb
	1

coilbox

COILBOX + WATERBOX

Coil cleaning system through active foam injection and rinsing

For effective cleaning in the delicate coils of air conditioning, both in the "condensing" outdoor units, as in "evaporator" interiors (splits, fancoils).

This innovative system has two modules complementary, the main one is the "coilbox" module, where all the technology for foam injection is integrated activated and rinsed with water, supplied by the water network.

The other "waterbox" module is a 30 litres tank of water. to be used when no connection is available to the network. The set of .the two modules makes it a fully autonomous equipment, both water supply and electricity, thanks to its rechargeable battery.





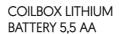
APPLICATIONS \





OPTIONAL ACCESSORIES V







SPLIT CASSETTE SLEEVE. SPLIT CASSETTE SLEEVE.

Easily clean a split cassette with this cleaning sleeve.

AC3303330



Easily clean a wall split with this cleaning sleeve.

AC3303329



REDIRECTION ELBOWS.

90° AC3303316

45° AC3303315

AC3303405

CONSUMABLES >



COILFOAM. High effectiveness alkaline degreaser for serpentines with no coating treatment. Bag in box 10 kg PQ8400100



COILNET. High effectiveness alkaline degreaser for serpentines. Bag in box 10 kg PQ8400101

Power supply	220 V - 110 V Using rechargeable battery
Output pressure	7 bares a 2 litros / min
Rechargeable chemical product	Bag in box de 10 litros
Waterbox" water tank	30 litres Modular
Structure material	Stainless Steel Aluminium
Approximate consumption	5m2/liters of product [Coilnet AF]
Dimensions L x W x H	436 x 422 x 1130 mm 17,16 x 16,61 x 44,48 inch

ecoil

Portable coil cleaning system by means of active foam injection and rinsing

For effective cleaning of delicate air conditioning coils, both in outdoor "condensing" and indoor "evaporating" units (splits, fan coils).











LI-Ion BATTERY. 96Wh 1 hour of autonomy. AC3303419

BATTERY CHARGER. For lithium battery 4.5A AC3303601

NOZZLE 40°. For 370004007

rinsing and cleaning.



AC3303108



SPIRAL HOSE.

TECHNICAL FEATURES



OPTIONAL ACCESSORIES



GUN

AC3303344





ACCESSORY KIT. 3 atta-AC3303305

SPLIT CASSETTE SLEEVE. SPLIT CASSETTE SLEEVE. 2 nozzles of 45° and 90°. with this cleaning sleeve. AC3303330

chable 30 cm of 30 cm, Easily clean a split cassette Easily clean a wall split with this cleaning sleeve. AC3303329

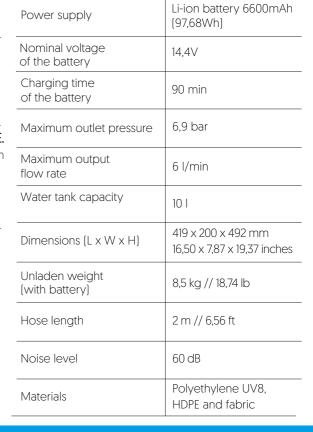
CONSUMABLES



COILFOAM. High effectiveness alkaline degreaser for serpentines with no coating treatment. Jerrycan 10 liters PQ8400106



COILNET. High effectiveness alkaline degreaser for serpentines. Jerrycan 10 liters PQ8400105





dinetB100 ultrasonic

Portable ultrasonic cleaning equipment

Ultrasonic cleaning consists of energy that is initiated in the generator and distributed to the transducers or ultrasonic emitters. In this way, they implode the water molecule (cavitation), generating a micro brush in the piece to be cleaned. This process, together with the temperature offered by the equipment, makes the B100 ultrasonic the fastest and most effective system for cleaning and disinfecting air conditioning grilles and diffusers.



APPLICATIONS \





SPEED. In a matter of seconds the dirt is removed without the need for any kind of manual finishing, we achieve cleaning and disinfection in a single operation.

EFFECTIVENESS. The action of ultrasound penetrates all the cavities, providing extreme cleanliness.

SAVINGS. The amount of water and product is reduced cleaning. The water is reused for successive washings.

ECOLOGICAL. The cleaning liquid is composed of water and a small proportion of a specific detergent

CONSUMABLES \





SONICLEAN.

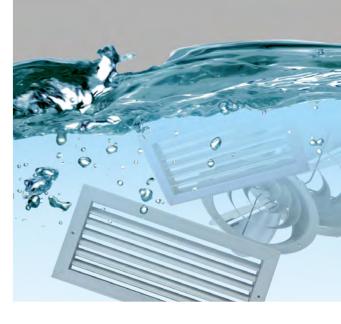
Detergent for cleaning metal parts. Jerrycan 10 liters.

PQ8100501

SONIPOWER.

Cleaning power enhancer to be added to the detergent. Jerrycan 10 liters.

PQ8200200



Power supply	230V 50/60Hz	110V 60Hz	
Jltrasonic power	1200 W 900 W		
Heating power	2000W	1000W	
Number of transducers	28 kHz		
Ultrasonic frecuency	24 uds.		
External dimensions	800 x 530 x 1060 mm 31,5 x 20,8 x 41,7 inch		
nterior dimensions	530 x 290 x 550 mm 20,8 x 11,4 x 21,6 inch		
nterior volume	85 litros		
Weight	kg / 192 lb		

testair

Particulate matter sampling pump in ducts

TESTAIR is an equipment to carry out the sampling of surfaces for the verification of the cleanliness in ventilation and air conditioning system (HVAC) ducts. Sampling is carried out by means of an air suction pump connected by means of a pipe. Flexible to a few filters contained in a cassette.

Highly portable and easy to use

The aspiration is done following a template that complies with the NADCA standard placed on the surface of the duct. Particulate material stays in the filters and then weighed to measure the quantity per unit area.















Transport case. Surface sampler 10 mce microsamples ø37-0.8 10 Nadca sampling guides



Power supply	230 V - 50 Hz 110 V - 60 Hz
Flow rate	30 I/min - 7,92gpm(US)
Weight of calibrated cassettes	10,61 g (sin etiquetas)
Dimensions L x W x H	470 x 350 x 190 mm 18,5 x 13,77 x 7,5 inch
Weight	6 kg 13,23 lb



microbio

Microbiological air measurement equipment

The standard UNE 100012 establishes a compulsory measurement of Colony Forming Units (CFU), both before and after cleaning, as well as before and after the disinfection of air ducts.

Comparison with the standard will determine the disinfection requirements.





CASE CONTENTS

Transport case. 1 x PC Reporter software. 4 x Rechargeable batteries. 1 x Battery charger. 1 x Microperforated head. Instructions of use and software.

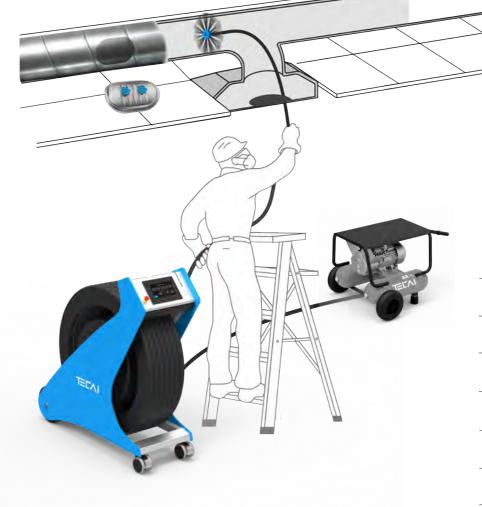


ower supply	4 x AA NiMH batteries	
low	100 l/min	
/olume sample	10 to 2000 litres in varing steps	
ample volume apacity	60.000 litres before recharge*	
150 Particle size	7 μm (220 x 1mm hole head) 1.35 μm (400 x 0.7mm hole head)	
Mean particle relocity	9.62 ms-1 (220 x 1mm hole head) 10.7 ms-1 (400 x 0.7mm hole head)	
Other features	 - Auto switch off - Delayed start up to 60 min - 4-digit 7-seg LED display - Sample cancel feature - Padded carry bag supplied 	
loise level	< 75dB	
imensions (L x H x W)	196 x 100 x 110 mm 7.7 x 4 x 4 inch	
Veight	650 g (inc. battery and petri dish))	



Compressed air generator for brushing robots

Pneumatic brushing equipment requires compressed air for operation. For this reason, we have designed air generators that adapt to the requirements of work to be done with the best performance: Maximum air flow and pressure in single-phase connection, low noise level for night work, being able to work continuously without heating, and also a great portability.



COMPATIBLE EQUIPMENT V



PROAIR. Pneumatic brushing equipment for air ducts. Pages. 15-16



MULTIBOT. Air duct cleaning robot. Cleaning module A100. Pages. 9-14

Voltage	230V 50Hz
Power	22 KW
Intake	400 I/min
Output flow (5 bar)	280 I/min
Tank	18
Pressure	10 bar
r.p.m.	2850 r/min
Noise level	82 dB
Number pistons	2
Ph	1
Weight	44 kg 97 lb
Dimensions (L x W x H)	572 x 636 x 520 mm 22.5 x 25 x 20.4 inch

Compressed air generator for brushing robots

Pneumatic brushing equipment requires compressed air for operation. For this reason, we have designed air generators that adapt to the requirements of work to be done with the best performance: Maximum air flow and pressure in single-phase connection, low noise level for night work, being able to work continuously without heating, and also a great portability. This compressor is indicated for those places where a voltage of 110V - 60 Hz is used.





AR18

PROAIR. Pneumatic brushing equipment for air ducts. Pages. 15-16



MULTIBOT. Air duct cleaning robot + Cleaning module A100. Pages. 9-14

Power supply	110V - 60Hz
Nominal pressure	9 bar 125 psi
Power supply	370 l/min
Outflow rate (5 bar)	280 I/min
Flow rate (6,27 bar)	9,2 cfm 260 l/min
Motor power	2.0 HP 120V 18.8A
Sound level	79 dB
Operating principle	Piston
size	30 8 gal
Plug type	NEMA 5-20P
Dimensions (L x W x H)	1135 x 470 x 635 mm 44,5 x 18,5 x 25 inch
Weight	84 kg 183 lb

Compressed air generator for brushing robots

TECAl's pneumatic brushing robots require air compressed for its operation. Therefore, we have designed some air generators that adapt to the requirements of work to be carried out with the best performance as: Maximum air flow and pressure in single-phase connection, low noise level for work night, to be able to work continuously without heating and also, a great portability.



COMPATIBLE EQUIPMENT



TECAL

PROAIR. Pneumatic brushing equipment for air ducts. Pages. 15-16



MULTIBOT. Air duct cleaning robot + Cleaning module A100



"Paddle" System

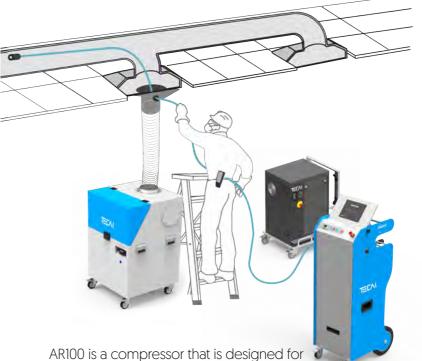
A patented system of sliding "paddles" which produce a large volume of air and high air pressure. Self-cooling, it can operate for 24 hours at a time.

Power supply		220V 50Hz	
Min. power cable	2,5 mm2		
section	3,88 x 10 3 in2		
Nominal pressure	10 bar 145,04 psi		si
Air delivery (5 bar 72,52 psi)	240 I/min 8,48 cfm		cfm
Reception capacity	360 I/min 12,71 cfm		cfm
Power	2,2 kW		
Sound level	70 dB		
Service temperature limit	5 - 40°0	C 41 - 10	14°F
Exit temperature	> 75°C > 167°F		
Residual oil in compressed air	< 3 ppm		
Hydraulic circuit capacity	1,5 litres 0,4 gal		
External structure Stainless steel material	Stainless steel		
Weight	50 kg 110,23 lb		
Dimensions (L x W x H)	802 x 565 x 390 mm 31,5 x 22,3 x 15,35 inches		

Compressed air generator for brushing robots

It is the only complement to your Visioair when it comes to provide large flows of compressed air. It is capable of providing a flow of up to 1300 I/min with reduced dimensions and weight that make it the ideal complement to the Visioair, being easy to use within the facilities. Its sound level is only 64dB, which will allow working in noise-sensitive environments or at night.





effective working pressures of 8 bar, 10 bar and 13 bar. It is air-cooled to provide optimum performance and energy savings. The drive that adapts to the demand of air

consumption.

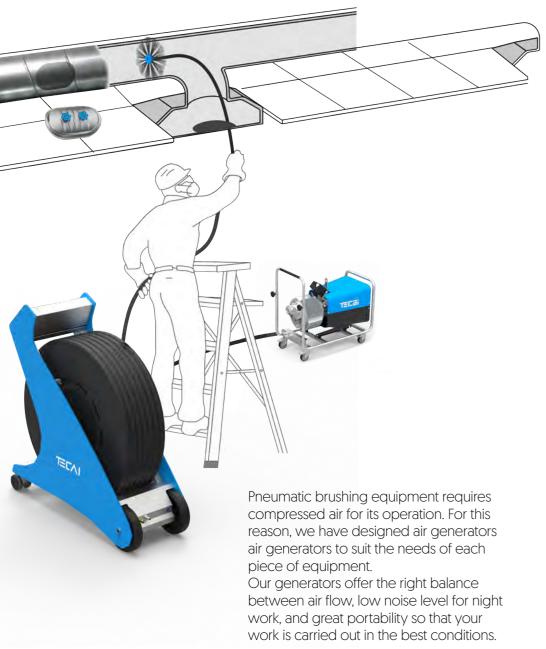
SUPPORTED EQUIPMENT V



VISIOAIR. Duct cleaning equipment with pressurized air. Pages. 7-8

Power supply	380V / 50 - 60 Hz 220V / 50 - 60 Hz
Motor power	7 kW (continuous operation)
Maximum air flow	13 bar
Air flow (I/min)	1300 I/min
Sound level in dB (A) with soundproofing kit	64 dB
Amount of oil in compressor circuit	5 litres
Cooling system	Air
Control panel	Membrane keypad
Material of the structure	Stainless steel
Veight	126 kg / 278 lb
Dimensions (L x H x W)	580 x 480 x 800 mm 22.8 x 18.9 x 31.4 inch











	AR 16	AR20	AR 18
Power supply	220 V / 50 Hz	400V / 3 / 50 Hz 220 V - 50 Hz 110 V - 60 Hz	110 V / 50 Hz
Suction flow rate	400 l/min	360 l/min	370 l/min
Output flow rate	280 I/min (5 bar)	240 I/min (5 bar)	2 6 0 l/min (5 bar)
Deposit	18 I / 4,7 gal	Continuous work	30 I / 4,7 gal
Pression	10 bar	10 bar	9 bar
Operating principle	Piston	Palettes	Piston
Noise level	82 dB	70 dB	79 dB
Weight	44 kg / 97 lb	50 kg / 110 lb	84 kg / 183 lb
Dimensions (L x H x W)	572 x 636 x 520 mm 22,5 x 25 x 20,4 inch	802 x 565 x 390 mm 31,5 x 22,3 x 15,35 in	1135 x 470 x 635 mm 44,5 x18,5 x 25 inch



Disposable coverall.



Limited-use protective coverall (PE+PP) impervious to particles and splashes of limited intensity. Antistatic, water vapor permeable, tear and abrasion resistant, lint free. Protection against biological agents according to Standard EN 14126:2003.

Size L - EP5600100 Size XL - EP5600101

Disposable mask.

High filtration capacity. Low in- and exhalation resistance. Soft hypoallergenic inner filter.



EP5300100

PVC gloves



Suitable for industrial cleaning and chemical industry. Ergonomic and flocked for comfort. Cotton flower for sweat absorption. Good grip in any situation. Exceptional comfort due to special PVC formulation.

> The long glove with heat-sealed cuff also protects you from liquid splashes.



Short - EP5200100 Long - EP5200200

Silicone mask with two filters.



Made of silicone, which avoids allergic discomfort, provides a comfortable fit and good resistance to the environment aggressive.

Special system of valve holder and filter holder in one piece, which gives the body and stiffness to the front of the mask.

EP5300200

Silicone mask filter.



Filter against particles, gases and vapors. Approved according to EN 14387:2004.

EP5300201

Face shield + visor.



Face shield + polycarbonate acetate visor. Guarantees exclusive comfort thanks to its innovative indirect ventilation that reduces CO2 concentration.

EP5100101

Replacement protective visor



EP5100200



PROTECTION OF CLEANING AREAS

Wall splits cover.



Its guick assembly and light weight make it an indispensable element for cleaning splits. The frame is made of a special aluminum alloy for light weight, acid resistance and high impact strength.

The downspout design makes it easy to collect liquids and dirt during cleaning. Water discharge pipe is one-piece to prevent liquid seepage. Dimensions: 1200 x 370 mm



AC3303329

Air conditioner cover.



The frame is made of aluminum alloy for light weight, acid resistance and high impact strength. The downward-flowing chute design facilitates the collection of liquids and dirt during cleaning. Stainless steel anchors for adjusting the height of the splits cleaning cover.

You can use a magnetic hitch or stainless steel hitch to hang the cleaning cover easily on the appropriate parts of the split body. The water discharge pipe is made in one piece to avoid liquid leaks. Dimensions: 1200 x 1200 mm

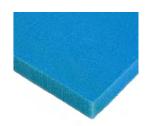
AC3303330

Quick Cover adhesive film. For covering gratings.



Adhesive film to cover grilles. Allows a perfect suction of the air duct when cleaning. It measures 500 mm wide.

Foam board. For duct section.



Foam sheet (1000 mm x 1000 mm x 60 mm) for duct section. Isolates the air conditioning ducts by sections for optimal cleaning.

AC3101150 1 unit AC3101154 4 units AC3101158 8 units HE7554100

PROTECTION OF CLEANING AREAS



Weatherstrip to protect the contour of the open manhole in the duct. Thanks to this protection the hose of your duct cleaning system will not be damaged.



AC6134102

Anti-breakage protector.

Anti-breakage protector for the shaft and hose of the brushing equipment.



AC3303112

Holding clamp.



Clamping clamp to place the plastics on the protection in the cleaning of air conditioning and extraction ducts.

Quick seal.

Tape for sealing air conditioning ducts.



By sealing the air outlets, the negative suction in the air ducts can be made effective to extract all dust and residues.

3,5 cm HE7400200 5,5 cm HE7400300 50 mm x 15 m AC5207450 75 mm x 15 m AC5207475



Water hose extension.



Allows water to reach your equipment no matter how far away the intake is. (10 meters).

Universal tap adapter.



Universal faucet adapter that allows the connection of your hose to all types of non-threaded faucets.



AC6200003

HE7300200

TOOLS AND RELATED PRODUCTS

Reversible pneumatic drill.



Reversible pneumatic drill for use in air conditioning ducts. The AR20 air generator has an additional output for tools such as a jigsaw or pneumatic drill.

HE7100100



Crown drain

HE7100101 Ø33 mm



Tool air hose

AC1012008 8 meter

Pneumatic reciprocating saw.



The ideal cutting tool for duct cleaning records.

Precise cutting and no risk of sparks that could cause fires inside the duct. The AR20 air generator has an additional output for tools such as a jigsaw or pneumatic drill.

HE7100200



Pneumatic saw blades

Pack 10 unitsHF7100201

Centering brush for Rotair equipment.



Accessory for centering the rotair brush. Allows to center the brush in the duct and thus to exert equal pressure on the whole diameter of the duct, avoiding lipping. By having wheels allows a better sliding and facilitates the handling of the hose by the operator. Valid for ducts since Ø400 mm.

AC3101400

Related equipment ROTAIR pag. 17-18



Centering brush for Proair equipment.



Accessory for centering the rotair brush. Allows to center the brush in the duct and thus to exert equal pressure on the whole diameter of the duct, avoiding lipping. By having wheels allows a better sliding and facilitates the handling of the hose by the operator. Valid for ducts since Ø400 mm.

AC3303133

Related equipment PROAIR pag. 15-16





Extensible sticks.



Expansion sticks for suction hose.

2 units

160 cm a 290 cm AC3101303

Nozzle adapters.



90° adapter for directing the nozzle

AC3303316



45° adapter for directing the nozzle

AC3303315

Coil comb.



The combs are used to clean and straighten the fins of evaporators and refrigeration condensers. Folding aluminum ramps.



Bamp for easy access to ducts and other uses.

2 units

150 x 20 cm AC660R015 1500 x 400 x 200 mm 220 x 20 cm AC660R020 2000 x 400 x 200 mm 250 x 20 cm AC660R025 2500 x 400 x 200 mm



SoniPower.

Detergente para rejillas y difusores de sistemas de climatización



Booster for SoniClean detergent used in ultrasonic cleaning of filters and other kitchen utensils. Dilute in water at a temperature of 80° - 90° in a proportion of 1 to 5 % depending on the type of dirt to be cleaned. for SoniClean detergent used in ultrasonic cleaning of filters and other kitchen utensils. It generates a more powerful and effective cleaning.

Jerrycan 10 liters PQ8200200

Related equipment
B100 ULTRASONIC pag. 27



SoniClean.

Booster for grilles and diffusers.



Specific detergent for cleaning with ultrasonic equipment on any type of metal part. It can also be used for filters and kitchen utensils. Dilute in water with a temperature between 50° - 80° in a proportion of 3 to 5 %. Use SoniPower to enhance the effect of the detergent in the most demanding cleanings.

Jerrycan 10 liters PQ8100501

Related equipment
B100 ULTRASONIC pag. 27



CoilFoam.

Coil degreaser uncoated.



Special detergent for cleaning coils without plastic coating (water repellent and oleophobic). Its powerful foam creates a dirt extraction effect from the inside to the outside. Once applied, proceed with a quick rinse of the coil.

Bag in box 10 kg PQ8400100

Related equipment COILBOX págs. 24



Coilnet.

Degreaser for air conditioning coils.



Special detergent for cleaning coils with plastic coating. It is highly recommended for cleaning ceiling and wall splits, and any coil. It is recommended to spray with the Coilbox equipment, leave for a few minutes and rinse with plenty of water.

Bag in box 10 kg PQ8400101

Related equipment COILBOX págs. 24





NDP Air Total.

The Surface Disinfection by an Aerial way (DSVA) equipment and air-conditioning ducts.



Applications for hospitals, offices, dental clinics, operating rooms, bathrooms and toilets, hotels. Effectiveness in Bacteria (EN13697, EN1276): Staphylococcus aureus, Enterococcus hirae, Pseudomonas aeruginosa, Escherichia coli. Fungi (EN13697, EN1650): Candida albicans, Aspergillus niger.

Jerrycan 5 liters PQ8400104

SANIT.

Surface disinfectant for critical areas. Bactericide and fungicide without formaldehyde.



Non corrosive. Aerial disinfection applicable by nebulization. Powerful clinical disinfectant to ensure a high level of decontamination on treated areas UNE-EN 1650, UNE-EN 1276 and AFNOR NF-T72-281. Suitable for all types of surfaces and materials

Jerrycan 5 liters PQ8300100

AK-Germa 100

Disinfectant superconcentrate for bacteria, fungi and viruses.



Bactericide-fungicide-virucide for environmental and food industry desinfection. AK-GERMA 100 is biodegradable. AK-GERMA 100 is a blend of alcohol, benzalkonium chloride and surfactants.

Box of 6 units of 1 liter

PQ8400113

Related equipment

MULTIBOT | Disinfection module D360° | Págs. 9-14



Elasbio

Sealant for fiber ducts.



Insulating sealant for fiber ducts. For use in industrial installations only.

Jerrycan 25 Kg PQ8400110

Related equipment

MULTIBOT | Disinfection module S360° | Págs. 9-14





Training for technicians in the cleaning of air conditioning systems

We have more than 20 years of experience working on the cleaning of heating, ventilation, and air conditioning systems (HVAC), as service providers in a first stage, and then as developers of the technology and methodology for this activity. Our range TECAI is specifically designed to perform this type of cleaning with high profitability and efficiency. That is why we are able to train any technician in all areas of this activity. We have a classroom and a training center and our students can participate in first person, as it is necessary for proper

learning. We have a training area with real facilities, with all the equipment, to be able to practice in-situ and apply the methodology throughout the

This course aims to cover the training needs of the sector, whose objective is that participants learns how to plan and execute a cleaning of an HVAC system, with better profitability and efficiency, thanks to the most advanced technology and procedures on the market.



Theory (6h)

Introduction to the I.A.Q. The "Sick Building Syndrome" Related Legislation Generalities of the UNE 100012 Facilities and particularities Evaluation and validation protocols

Robotic visual inspection Measuring systems Microbiological sampling

Evaluation frequencies Cleaning procedure

Data collection

Methodology for duct cleaning

Methodology for cleaning of air conditioners and AHU's Methodology for cleaning of grills and air diffuser

Methodology for cleaning of condensers (split units) and evaporators

Methodology for cleaning of heat exchangers and chimneys Disinfection systems

Business management

Occupational Risk Prevention Plan **Annex.** Glossary of terms



Practice (2h)

Preparation of facilities for cleaning

Environment protection Prevention of Labor Risks (EH&S) Opening access doors in ducts

Equipment connection and start-up Use of equipment

> Duct cleaning AHU's cleaning

Cleaning of grilles and diffusers

Transport, storage and maintenance of equipment Inspection

PFor any information on the training, you can call us by phone at [+34] 941 44 50 56 or send an email to info@teinnova.net



teinnovacleaning.com



