

360°
for your cleaning
business in
air-conditioning
systems



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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.
- ✓ Compliance with the law.
- ✓ Savings in maintenance and energy co

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.



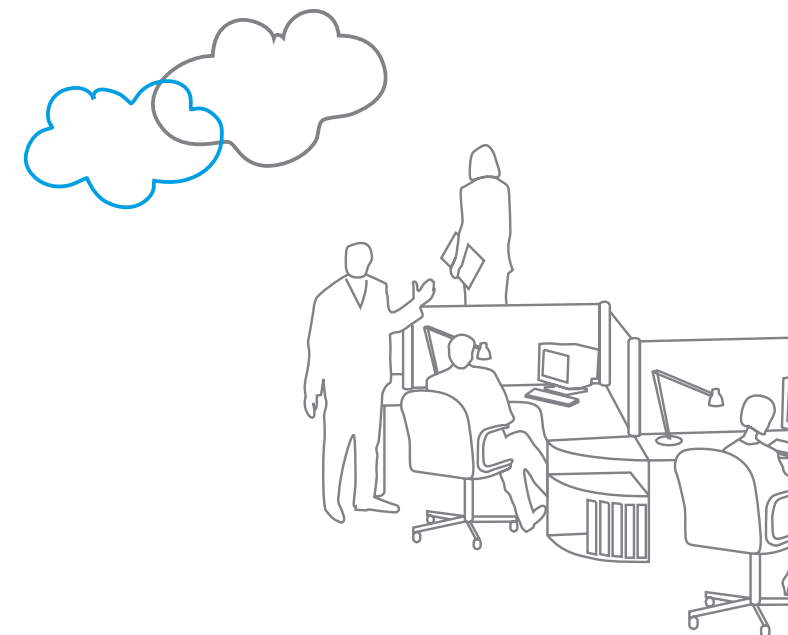
THE MARKET

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.



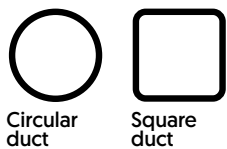
visiobot

Video inspection robot

VISIOBOT is the perfect ally for technical inspections in air conditioning or ventilation ducts. With front and rear cameras, this robot gives you a complete view of the inside of the ducts. Its compact and rugged design makes it easy to transport, while its long battery life allows you to work anywhere, even without electricity. Capture, record and edit high-resolution colour images for detailed analysis of every situation.



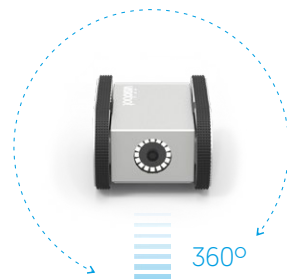
APPLICATIONS ▼



visiopro



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.



Rotation about the robot axis

360°

Speed-adjustable rotation, forward and reverse by joystick



Transport system consisting of two cases. One houses the tractor unit and cables. The second one houses the control panel.

TECHNICAL CHARACTERISTICS

Power:	230V / 50 - 60Hz / 110V / 50 - 60Hz 75 W max.
Alignment:	Electric and battery
Battery:	Li-ion 6600mAh (97,68Wh) / 14,4V
Control panel:	Membrane keyboard and joystick
Display system:	Display 11,6" / 256GB Full HD 1080p 60Hz
Tractor unit:	By means of a high-grip strap
Case dimensions:	470 x 357 x 176 mm 18,5 x 14,1 x 6,9 inches
Luggage weight:	8,5 kg // 18,74 lb
Tractor dimensions:	216 x 148 x 102 mm 8,5 x 5,8 x 4 inches
Tractor weight:	2,9 kg // 6,4 lb
Cable length	20 m // 49 ft
Tractor connection:	
Structural material:	ABS y HDPE

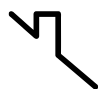
visionmax

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.



APPLICATIONS



Chimneys



Ducts



Exchanger tubes

Ø 30 to 400 mm

Scratch-resistant, waterproof, sapphire crystal LCD camera



TECHNICAL FEATURES

Camera	1/3" Sony CCD Ø22mm with sapphire crystal lens
Camera angle of vision	130 °
Viewing range	1000 mm
Colour image quality:	420 TV lines
Camera cable length	30 meters
Monitor	10" TFT-LCD Color
Image resolution	1920*1080 AHD
Sealing (Camera)	Submersible to 20 m in water
Illumination	15 white LEDs of adjustable brightness
Battery	Rechargeable LI-ION 7,2V / 6400mAh
Charger	110-230 V / 50-60Hz a 12V/1,5A
Charging time	10 hours
Battery duration	6-7 hours
Dimensions [L x W x H]	517 x 434 x 200 mm 20.3 x 17 x 7.9 inch
Weight	12 kg / 26 lb

STANDARD EQUIPMENT



ELECTRIC CHARGERS



WIRELESS REMOTE CONTROL



CENTRATOR



SD CARD

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



Modular design

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

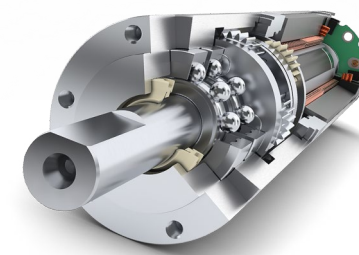
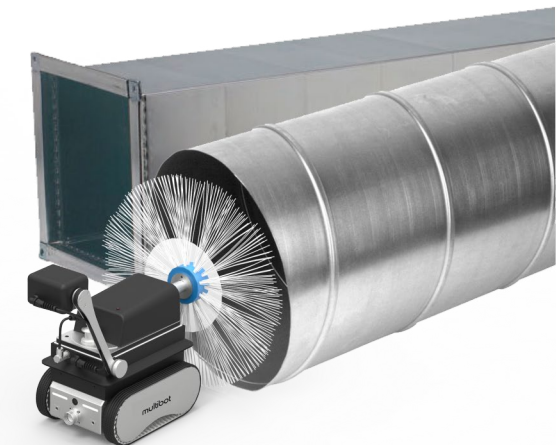
The Multibot's powerful traction crawler allows you to move over any surface and climb slopes of 30° inclination. The robot and the application modules are designed to clean any size of circular or square duct and for any size.

Robust and reliable

Built with the most resistant materials, such as stainless steel in the structure and 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

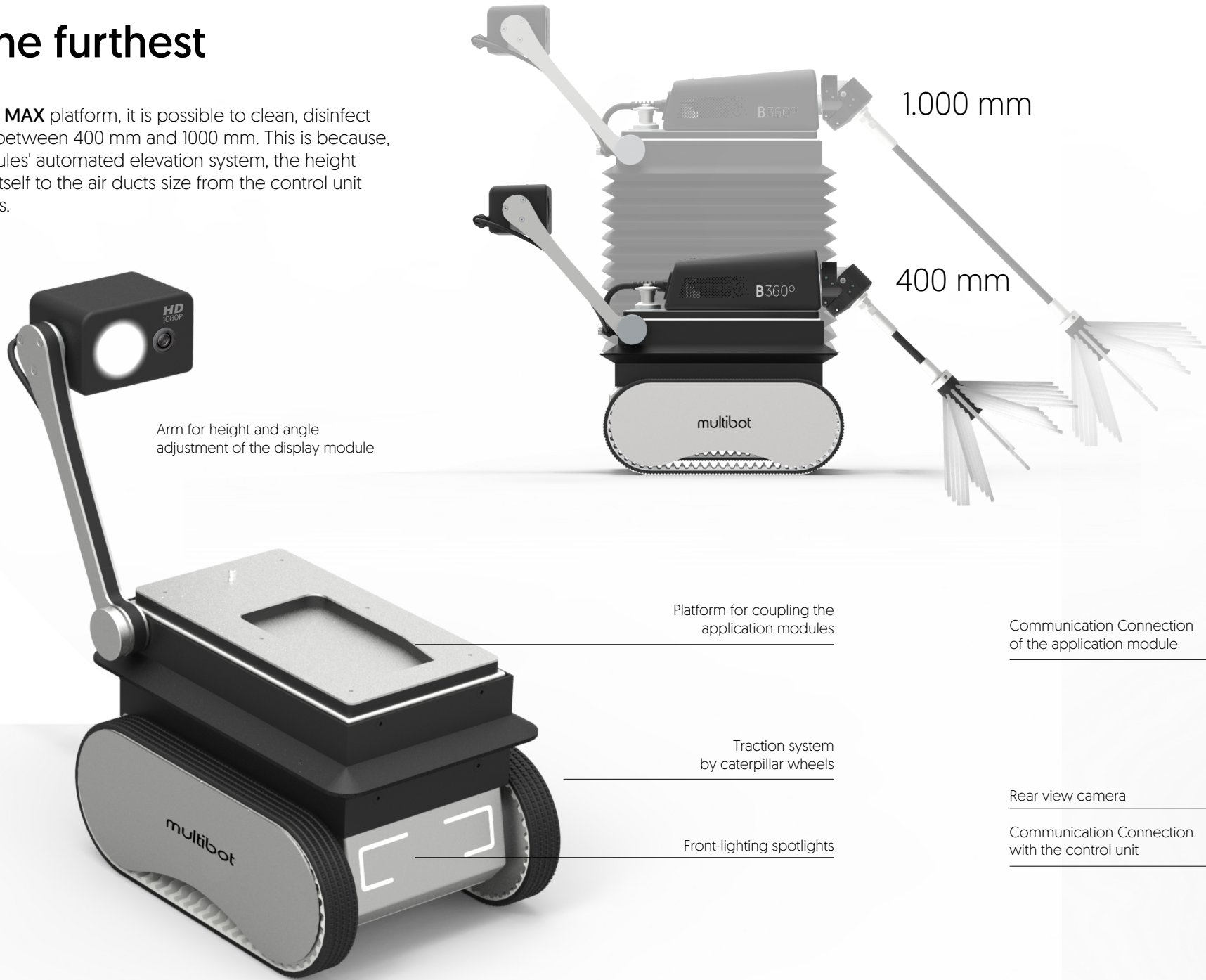
The last technology in visualization and recording of the images collected by Multibot in Full HD 1080P. It has a high resolution monitor for recording and storage of videos and photographs, with a touch screen resistant to dust and water.



ROBOT MAX

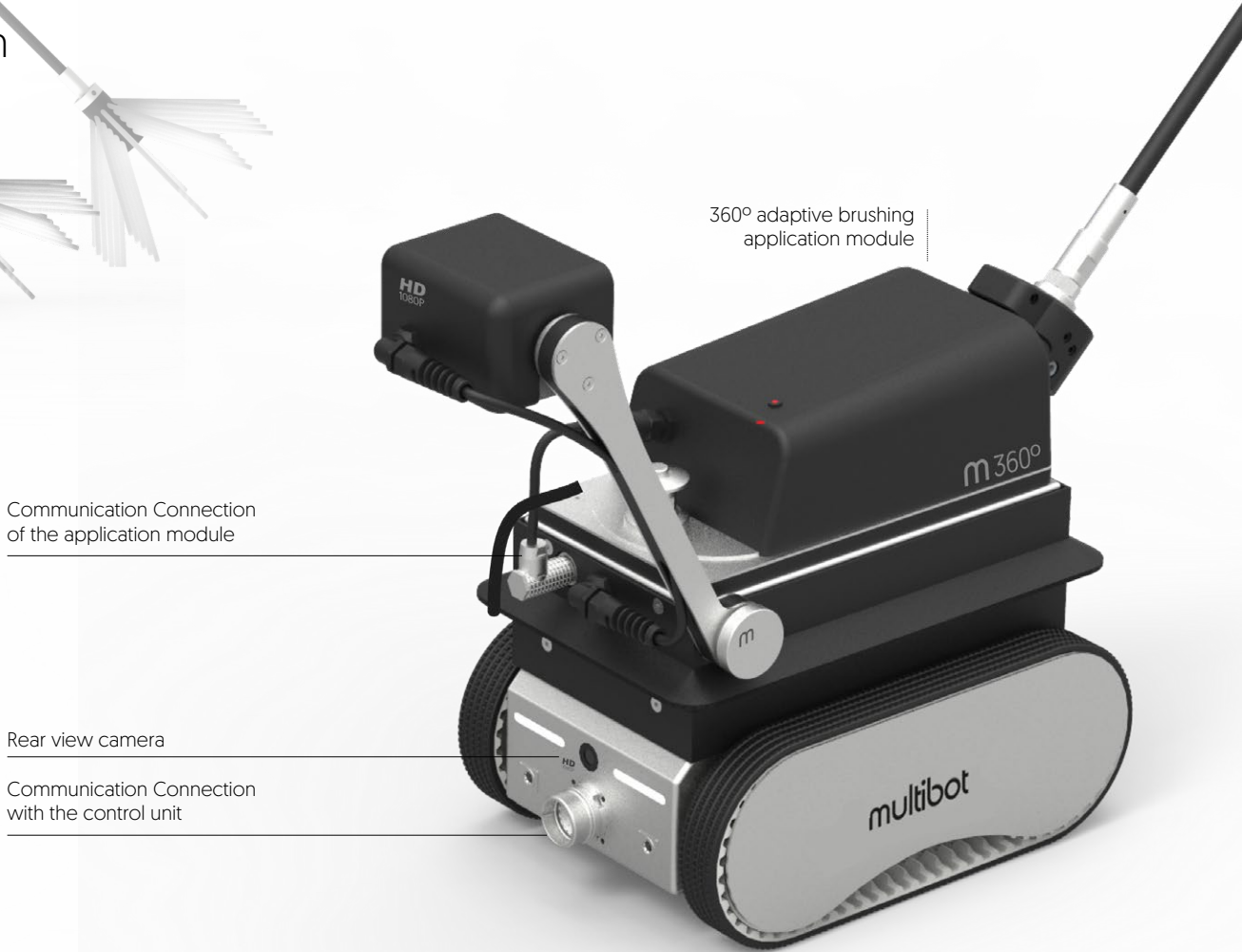
Reach the furthest

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.



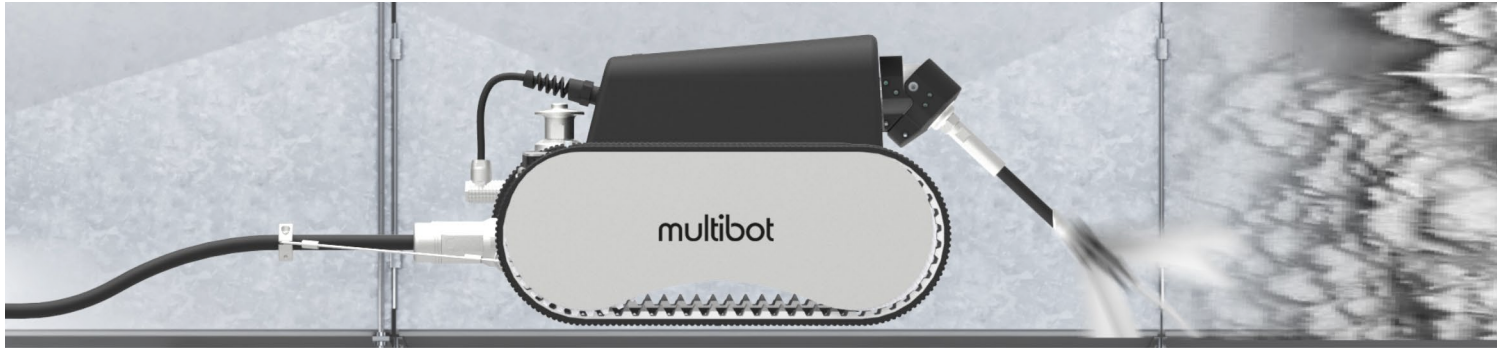
TECHNICAL CHARACTERISTICS

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°



Compact design

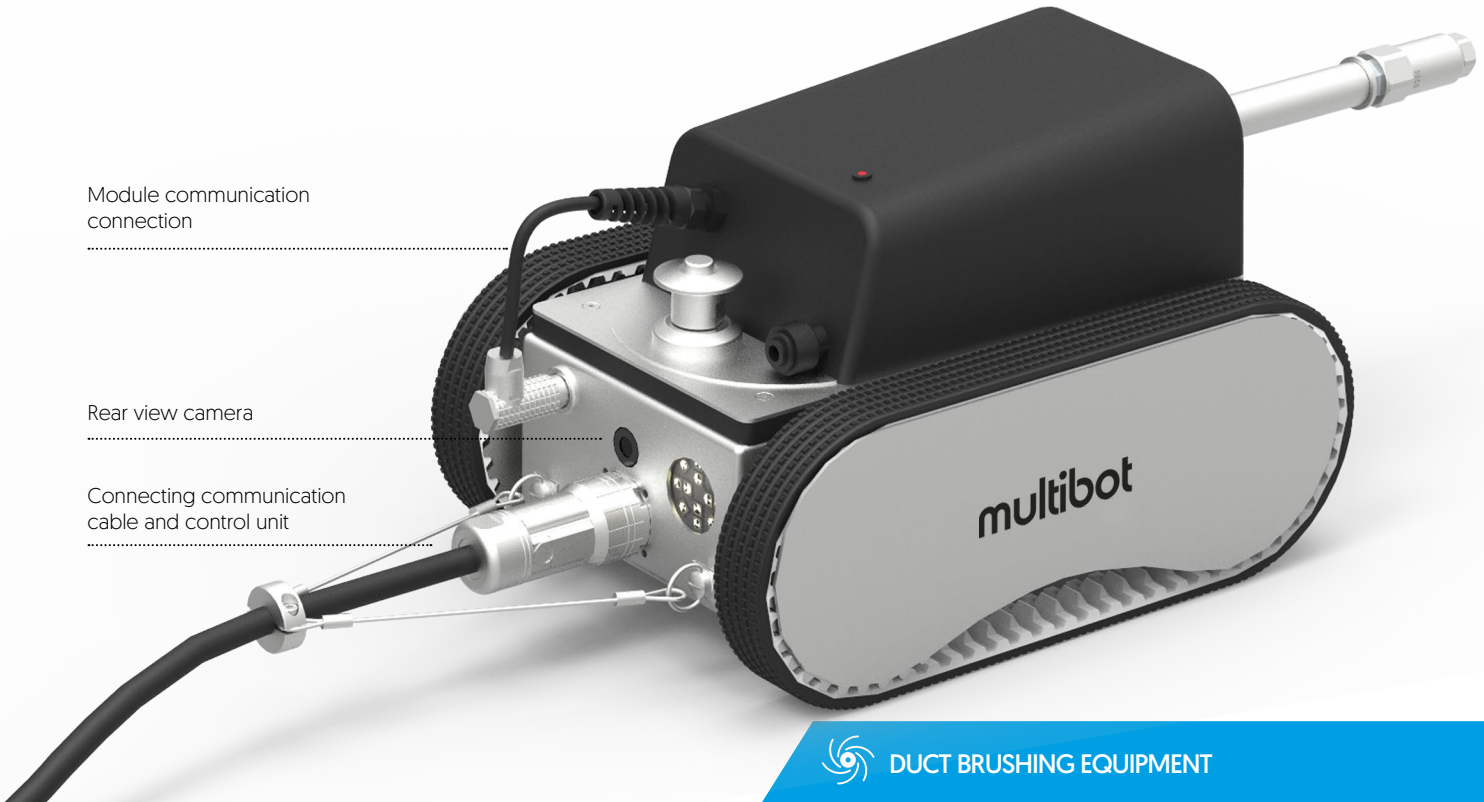
With the robotised **MICRO** platform, it is possible to clean, disinfect and coat the smallest air ducts between 250 mm and 500 mm, small outside and large inside. It integrates all the same advanced technology as it's big brother, the **MAX** robot, in order to carry out any task using the Multibot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



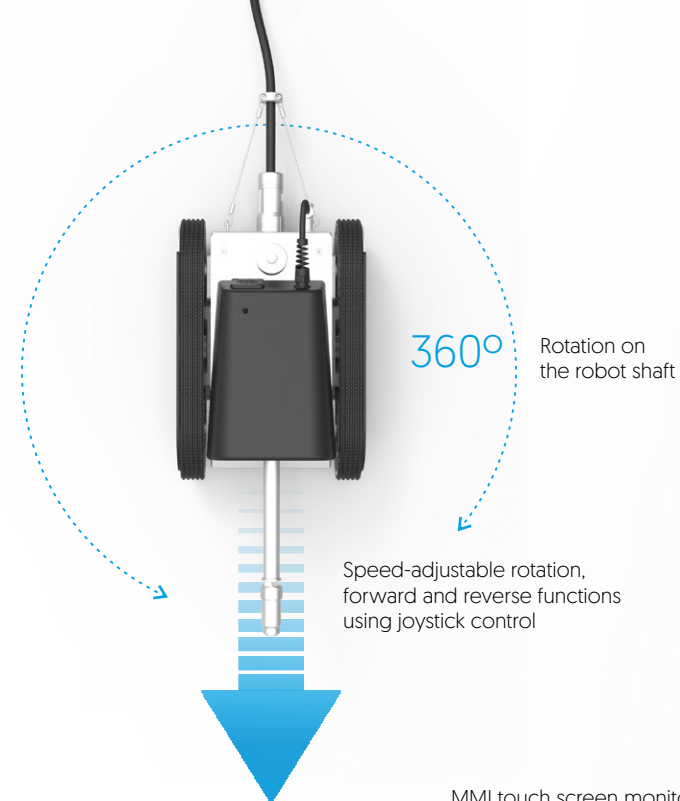
TECHNICAL CHARACTERISTICS

Dimensions and weight without module	L x W x H : 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



CONTROL UNIT



360°

Rotation on the robot shaft

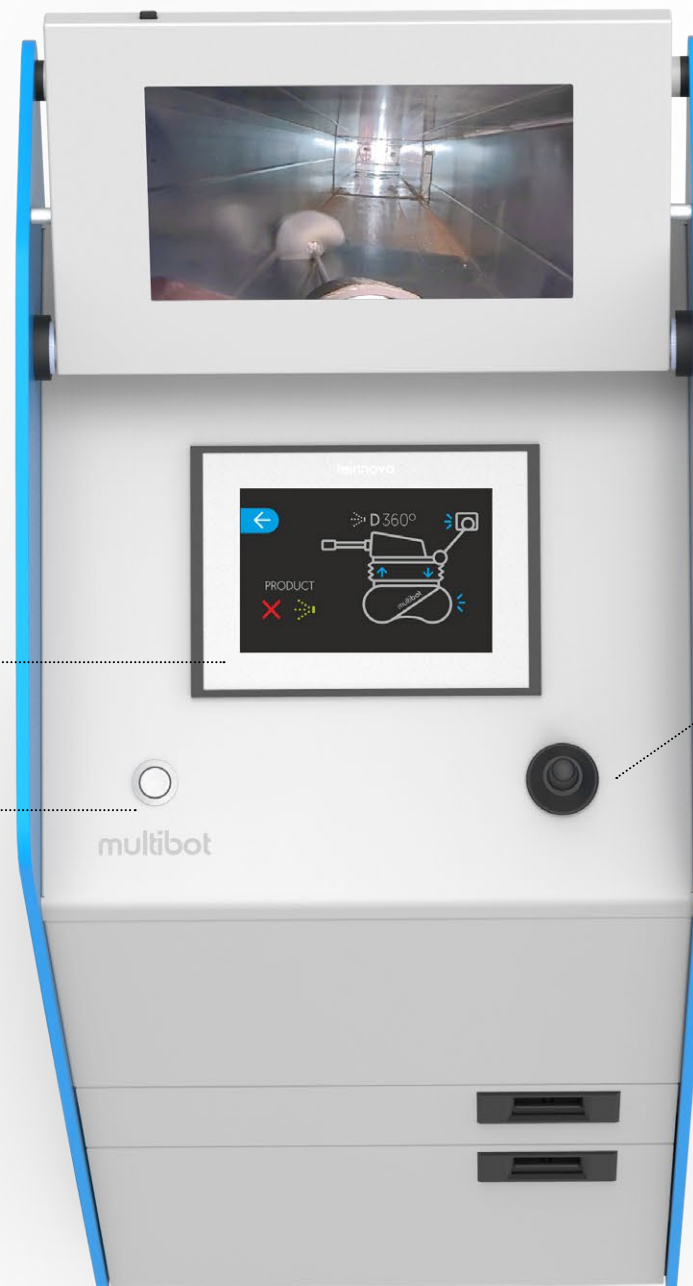
Speed-adjustable rotation, forward and reverse functions using joystick control

MMI touch screen monitor for control all robot functions and application modules

Activation switch of the control unit



Touch screen display and HD video recording



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

Reel for storing 20 m of cable from the communication cable between robot and control panel



TECHNICAL CHARACTERISTICS

Display monitor	10" 2048 x 1546 screen, Intel X7, 8GB RAM
Control screen	7" 800 x 480 px HDMI - Touch control
Structural material	Oven-painted steel and HDPE
Power supply	230V - 50 Hz // 110V - 60 Hz
Empty weight and dimensions	L x W x H : 486 x 416 x 1070 mm / 53 kg L x W x H : 19 x 16,3 x 42 inch / 116.8 lb



APPS MODULES

Quick Connect

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



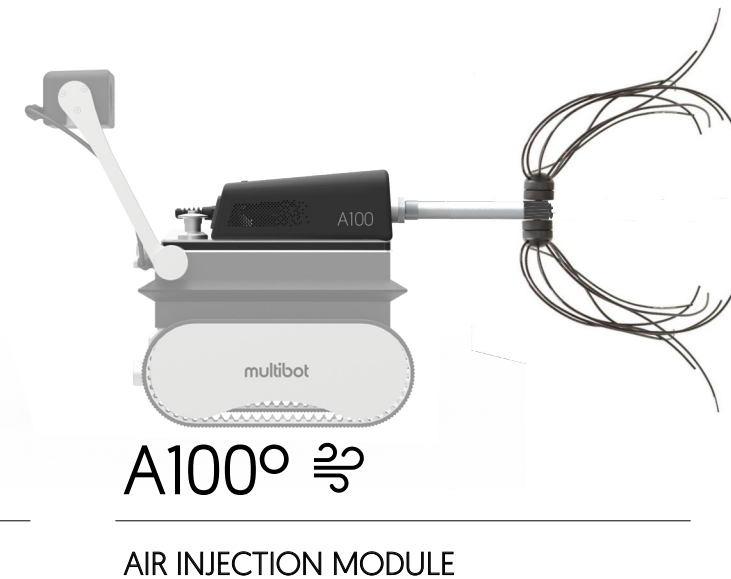
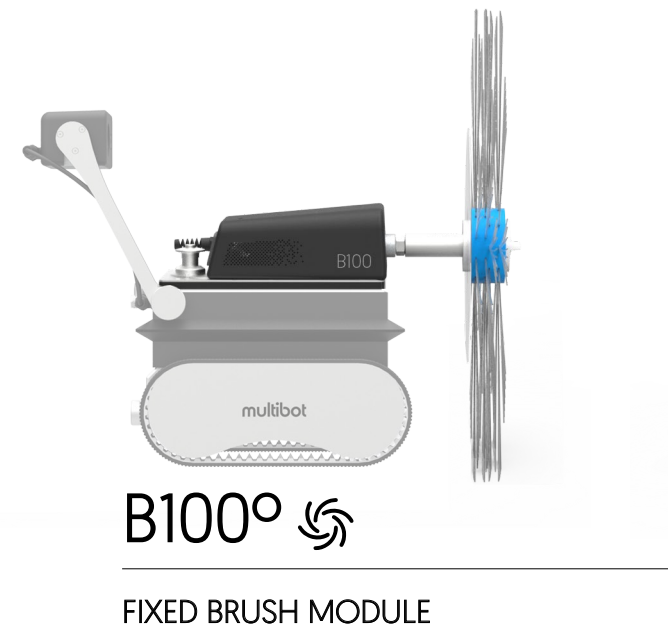
The Multibot's modular concept is made up of different modules which carry out different tasks inside air ducts, and all are compatible with the MAX and MICRO robotised platforms, with fast and easy connection.



Hose protector

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

CLEANING MODULES



COATING MODULE



DISINFECTION MODULE



proair

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..



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.

Centrator [Optional]

Fixes the brush in **the center of the duct**.

Brushes

Different materials and sizes for all types of ductwork.
DUO Square system for effective cleaning in square ducts.



LED indicator

Shows the status of the machine.

HMI screen

Control all equipment functions.

Shaft guard

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

PNEUMATIC

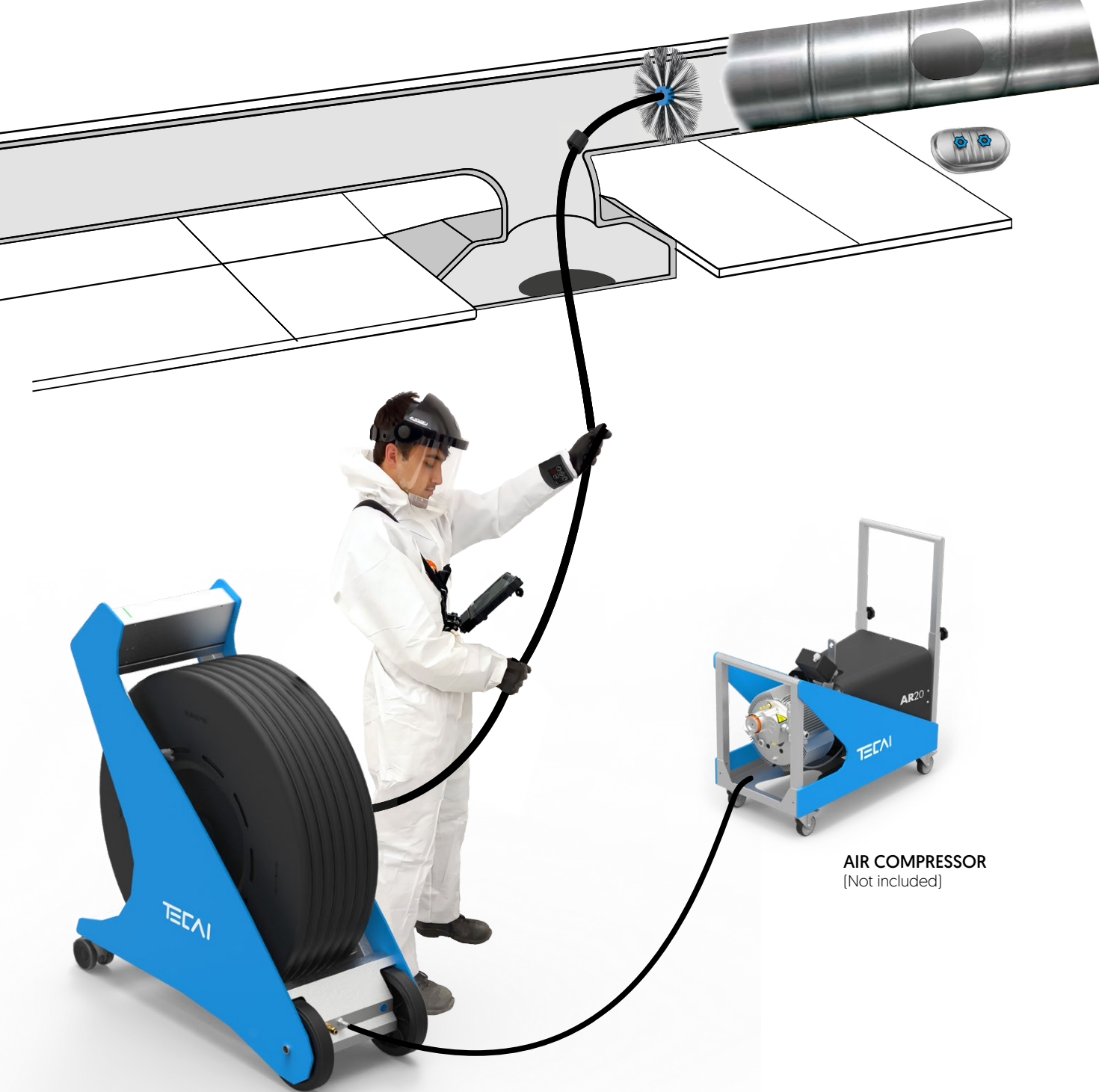
For ducts up to

1000 mm

Length of the flexible shaft

25 m





AIR COMPRESSOR
[Not included]

OPTIONAL ACCESORIES ▼



WRIST REMOTE CONTROL
AC3303605



VISIOPRO. Visualization system, camera harness, camera and carrying case.
SV3331036 SV-PRO



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



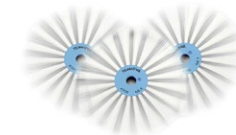
ANTI BREAKAGE HOSE PROTECTOR
AC3303112

CONSUMABLES ▼



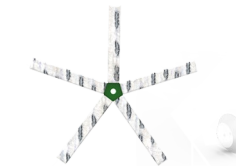
PACK 5 THICK NYLON BRUSHES.
For cleaning ducts with heavy dirt.
Ø200 | 300 | 400 | 500 | 600 mm

CP2201015



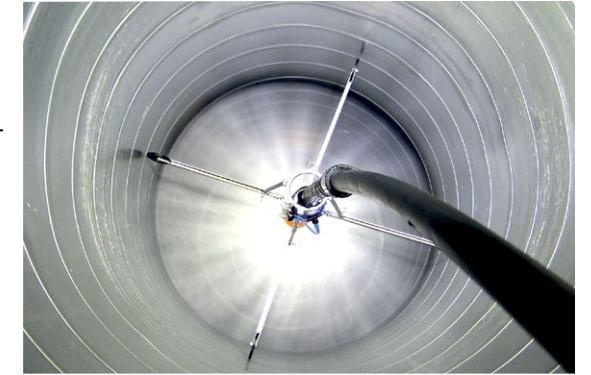
PACK 5 FINE NYLON BRUSHES.
For maintenance and delicate duct cleaning.
Ø200 300 | 400 | 500 | 600 mm

CP2110505



MOP BRUSHES.
Ø 150-300 mm
CP5150300
Ø 300-500 mm
CP5300500
Ø 500-800 mm
CP5500800

ADAPTER KIT
AC6470060



TECHNICAL FEATURES

proair

Motor power supply [Maximum power]:	220 l/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
Control panel	HMI screen
Dimensions [L x W x H]	1118 x 440 x 1172 mm 44 x 17,32 x 46,14 inch
Weight	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.

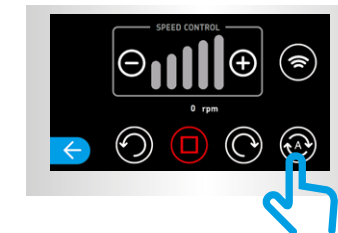


LED indicator

Shows the status of the machine.

HMI screen

All control with just one finger



Regulates:

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

ELECTRIC SYSTEM

For ducts up to

600 mm

Hose lenght

15 m With
VISIOPRO

20 m Without
VISIOPRO





OPTIONAL ACCESORIES ▼



WRIST REMOTE CONTROL

AC3303605



VISIOPRO. Visualization system, camera harness, camera and carrying case.

SV3331037 SV-ROT



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

AC3101500



ANTI BREAKAGE HOSE PROTECTOR

AC3303112

CONSUMABLES ▼



PACK 5 NYLON SQUARE DUCT BRUSHES.

Single core and two rows of brushes of different sizes. Ø250 | 300 | 350 | 400 | 500 mm

CP2300510



PACK 5 FINE NYLON BRUSHES.

For maintenance and delicate duct cleaning. Ø200 | 250 | 300 | 350 | 400 mm

CP2300505



MOP BRUSHES.

Ø 150-300 mm
CP5150300
Ø 300-500 mm
CP5300500
Ø 500-600 mm
CP5500800

ADAPTER KIT

AC6470060



WRIST REMOTE CONTROL

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

TECHNICAL FEATURES

rotair

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 VISIOPRO]
Structure material	Stainless steel and HDPE
Dimensions [L x W x H]	992 x 365,5 x 962 mm 39 x 14,39 x 38 inch
Weight	60 kg // 132 lb

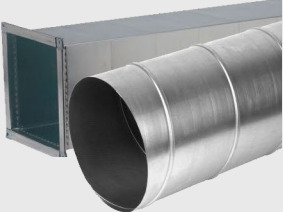




rotair

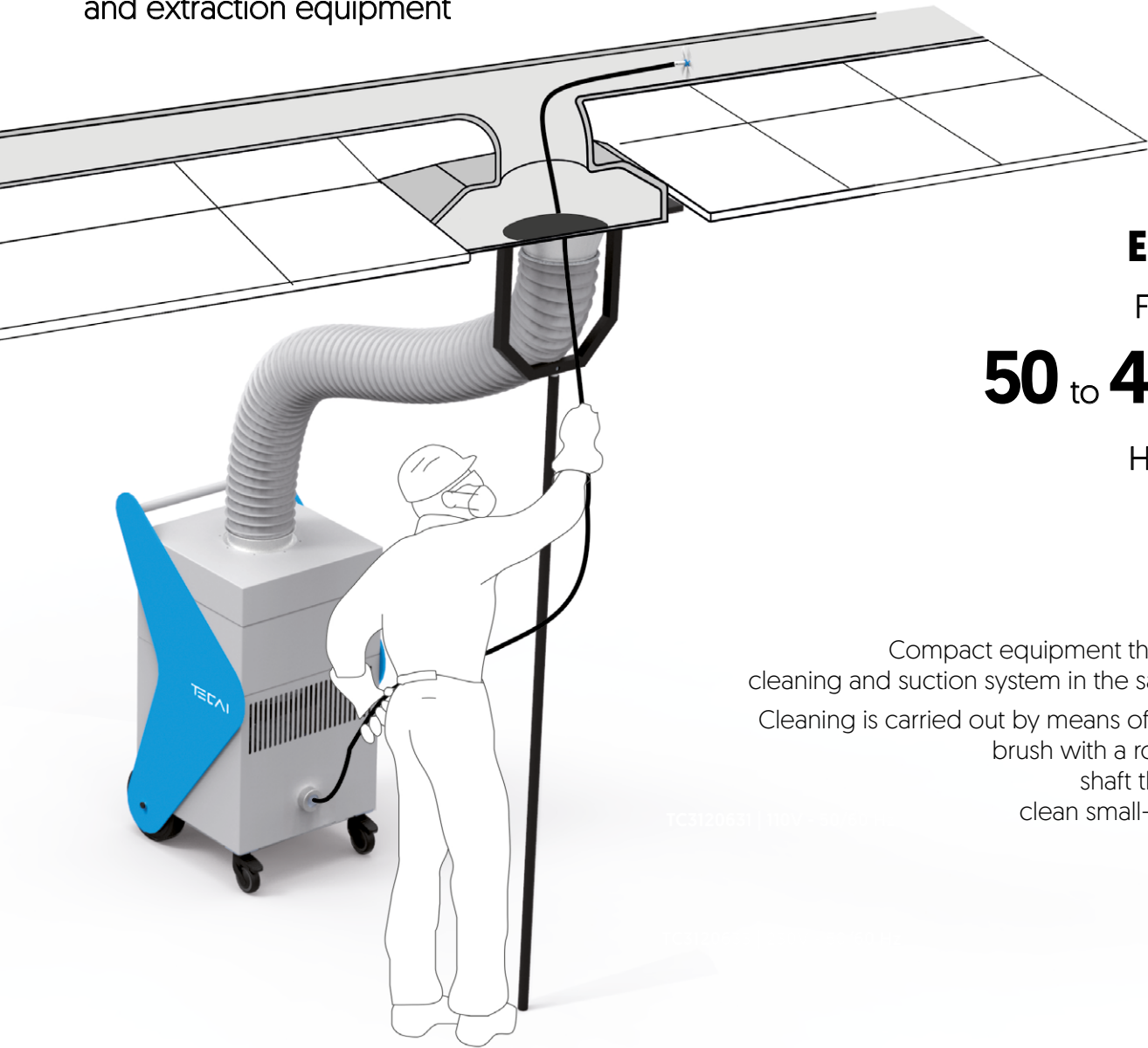
VOLTAGE	 VISIOPRO Allows the cleaning to be viewed and recorded. No post-purchase installation possible.	 HOSE LENGTH Access from your location to the inside of the duct. Allows rotation of the brush	 WRIST REMOTE CONTROL Allows a single operator to control the equipment.	 CENTERING Fix the brush in the centre of the duct. Recommended from Ø400mm	P.V.P. CODE
220W 50/60Hz	✓	15 meters	OPTIONAL	OPTIONAL	TC3120416
	✗	20 meters	OPTIONAL	OPTIONAL	TC3120412
110W 50/60Hz	✓	15 meters	OPTIONAL	OPCIONAL	TC3120417
	✗	20 meters	OPTIONAL	OPCTIONAL	TC3120413



TECAI[®] COMPARATIVE 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
 rotoair	BRUSHING	With VISIOPRO 15 m Without VISIOPRO 20 m	 OPTIONAL	 - +	OPTIONAL	ELECTRIC	Ø200 to 600 mm ✓ Squares ✓ Circular ✓ Coated fiber
 proair	BRUSHING	25 m	 OPTIONAL	 - +	OPTIONAL	NEUMATIC [air compressor required].	Up to Ø1000 mm ✓ Squares ✓ Circular ✓ Coated fiber

venet

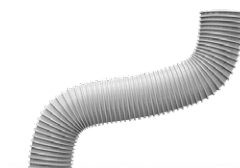
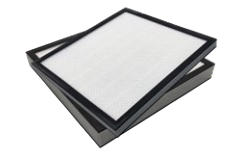
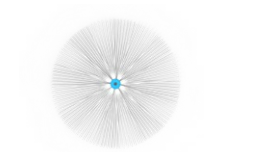
Ventilation and air-conditioning duct cleaning
and extraction equipment



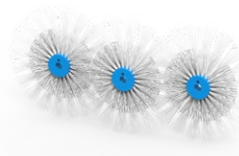
ELECTRIC
For ducts of
50 to 400 mm
Hose lenght
10 m

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
clean small-section ducts.

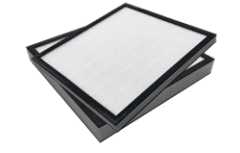
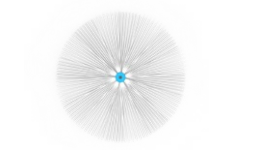
INCLUDED ACCESSORIES ▼

		
VACUUM HOSE. Ø160 mm, 3,33 m of length AC3101319	ADAPTER HOSE DUCT. Ø160 mm AC3101404	FLEXIBLE SHAFT WITH BAG. 10 m. Ø50-250 mm AC3303614
		
F7 AND H13 FILTERS. 400 X 400 X 21. 1 unit. 400 X 400 X 46. 1 unit.	REMOTE CONTROL. AC3303605	NYLON BRUSH. Ø250 mm, CP4000250

OPTIONAL ACCESSORIES ▼

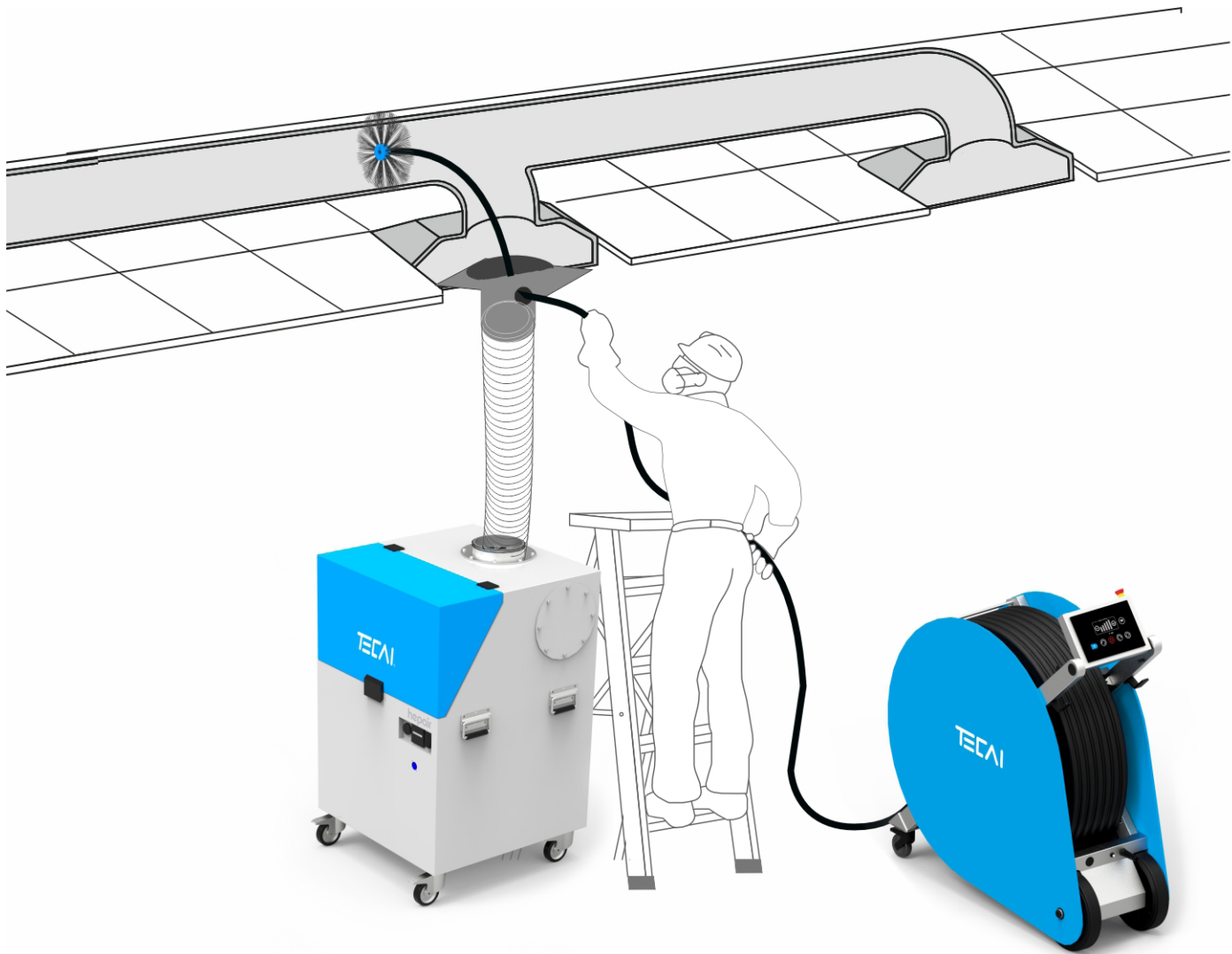
		
PACK FINE NYLON BRUSHES. Ø300 350 400 mm CP2103040	PACK NYLON SQUARE DUCT BRUSHES. Ø300 350 400 mm CP2104055	FLEXIBLE SHAFT. 15 m. Ø300-400 mm AC3303615

CONSUMABLES ▼

		
F7 AND H13 FILTERS. 400 X 400 X 21. 1 unit. AC1300007 400 X 400 X 46. 1 unit. AC1300013	G4 PREFILTER. 380 x 380 x 96. 1 unid AC1300004	NYLON BRUSH. Ø250 mm, CP4000250

TECHNICAL FEATURES **venet**

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 inches
Weight:	50 kg // 110,2 lb



hepair
2000



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

hepair
6000



High power vacuum cleaner
for ductwork from
300 mm to 1200 mm.

COMPARATIVE TABLE OF
DUCT SUCTION SYSTEMS

	hepair 2000	hepair 6000
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

hepair 2000

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.



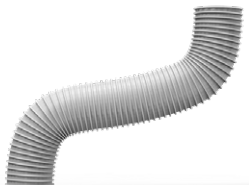
APPLICATIONS



Triple filtration:
pre-filter G4 + M5 bag
filter + H13 absolute filter



OPTIONAL ACCESSORIES



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

AC3101308



EXTENSIBLE STICK
For suction hose. Extendable from 160 to 290 cm. 1 unit.

AC3101303

CONSUMABLES



THICK PREFILTER G4.
10 units.

AC3101305



BAG FILTER M5.

AC3101306



HEPA13 FILTER.

AC3101309

TECHNICAL FEATURES

hepair ₂₀₀₀	
Supply voltage	230 V - 50 Hz 110 V - 60 Hz
Maximum vacuum volume	2000 m3/h 1177,2 cfm
Maximum depression	2500 Pa - 0,36 psi
Triple filtration 3 F	Prefilter G4 Bag filter M5 HEPA H13 Absolute filter
Separation degree	>99%
Engine power	880 W
Noise level	72 dB
Dimensions [L x W x H]	611 x 590 x 943 mm 24 x 23 x 37 inches
Weight	80 kg / 176,37 lb





hepair 6000

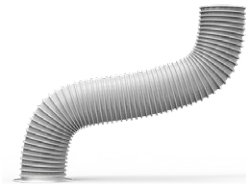
The ultimate solution in negative suction for duct cleaning

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. It includes an acoustic filter clogging indicator to know when a change is needed.

APLICACIONES ▼



OPTIONAL ACCESSORIES ▼



VACUUM HOSE
Ø300 mm - 5 m long

AC3101321



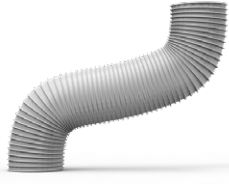
BAG FILTER F7

AC3101316



ADAPTER "Y" Ø300.
For fitting the sleeve
in square and circular
ducts.

AC3101406



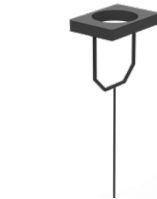
VACUUM HOSE
Ø400 mm - 5 m long

AC3101320



ABSOLUTE FILTER
HEPA 13

AC3101317



ADAPTER "Y" Ø400.
For fitting the sleeve
in square and circular
ducts.

AC3101405



DECANTER SLEEVE.
T-shape, 120 l tank.
2.5 m hose Ø400 mm
included.
AC3101322

Easy to transport,
both horizontally
and vertically



TECHNICAL FEATURES hepair 6000

Supply voltage	230 V / 50-60 Hz
Electric consumption	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
Sound level	80 dB
Dimensions [L x W x H]	670 x 750 x 1300 mm 26,4 x 29,5 x 51,2 inch
Weight without filters	80 kg / 176 lb
Weight with filters	100 kg / 220 lb



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 ▼



HEPA FILTER

AC3101151

STANDARD EQUIPMENT ▼



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 l
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

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).



ACCESSORIES INCLUDED ▼



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



BATTERY CHARGER. For lithium battery 4.5A
AC3303601



NOZZLE 40°. For rinsing and cleaning.
370004007



GUN
AC3303344



SPIRAL HOSE.
AC3303108

OPTIONAL ACCESSORIES ▼



ACCESSORY KIT. 3 attachable 30 cm of 30 cm, 2 nozzles of 45° and 90°.
AC3303305



SPLIT CASSETTE SLEEVE. Easily clean a split cassette with this cleaning sleeve.
AC3303330



SPLIT CASSETTE SLEEVE. Easily clean a wall split with this cleaning sleeve.
AC3303329

CONSUMABLES ▼



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



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



TECHNICAL FEATURES **ecoil**

Power supply	Li-ion battery 6600mAh [97,68Wh]
Nominal voltage of the battery	14,4V
Charging time of the battery	90 min
Maximum outlet pressure	6,9 bar
Maximum output flow rate	6 l/min
Water tank capacity	10 l
Dimensions [L x W x H]	419 x 200 x 492 mm 16,50 x 7,87 x 19,37 inches
Unladen weight [with battery]	8,5 kg // 18,74 lb
Hose length	2 m // 6,56 ft
Noise level	60 dB
Materials	Polyethylene UV8, HDPE and fabric



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 ▼



Filters



Grids

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



TECHNICAL FEATURES

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

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.



APPLICATIONS ▼



Ducts



AC Equipment



▶ CASE CONTENTS

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

TECHNICAL FEATURES

Power supply	230 V - 50 Hz 110 V - 60 Hz
Flow rate	30 l/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.



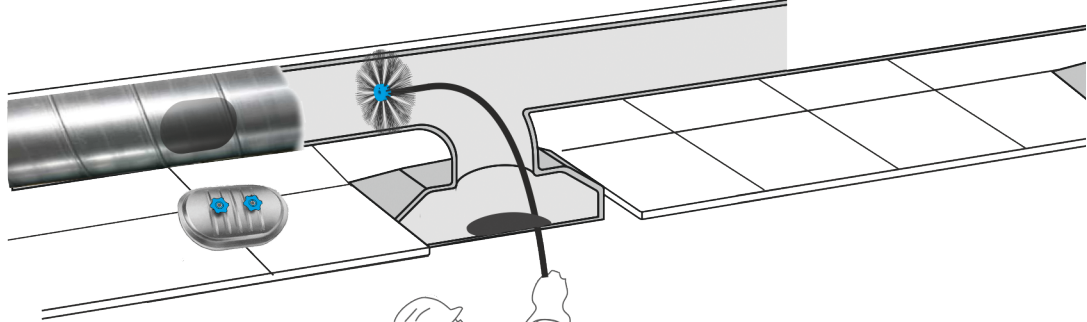
TECHNICAL FEATURES

Power supply	4 x AA NiMH batteries
Flow	100 l/min
Volume sample	10 to 2000 litres in varying steps
Sample volume capacity	60.000 litres before recharge*
d50 Particle size	7 µm (220 x 1mm hole head) 1.35 µm (400 x 0.7mm hole head)
Mean particle velocity	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
Noise level	< 75dB
Dimensions [L x W x H]	196 x 100 x 110 mm 7.7 x 4 x 4 inch
Weight	650 g (inc. battery and petri dish)]

AR16

Compressed air generator for brushing robots

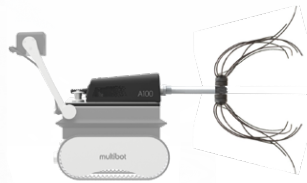
Pneumatic brushing equipment requires compressed air for operation. For this reason, we have designed air generators that adapt to the requirements of work to be done with the best performance: Maximum air flow and pressure in single-phase connection, low noise level for night work, being able to work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



COMPATIBLE EQUIPMENT



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



MULTIBOT. Air duct cleaning robot + Cleaning module A100 Pages. 7-12

TECHNICAL FEATURES

Voltage	230V 50Hz
Power	22 KW
Intake	400 l/min
Output flow [5 bar]	280 l/min
Tank	18 l
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

AR18

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.



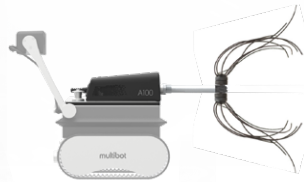
TECHNICAL FEATURES

Power supply	110V - 60Hz
Nominal pressure	9 bar 125 psi
Power supply	370 l/min
Outflow rate [5 bar]	280 l/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 l 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

COMPATIBLE EQUIPMENT



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

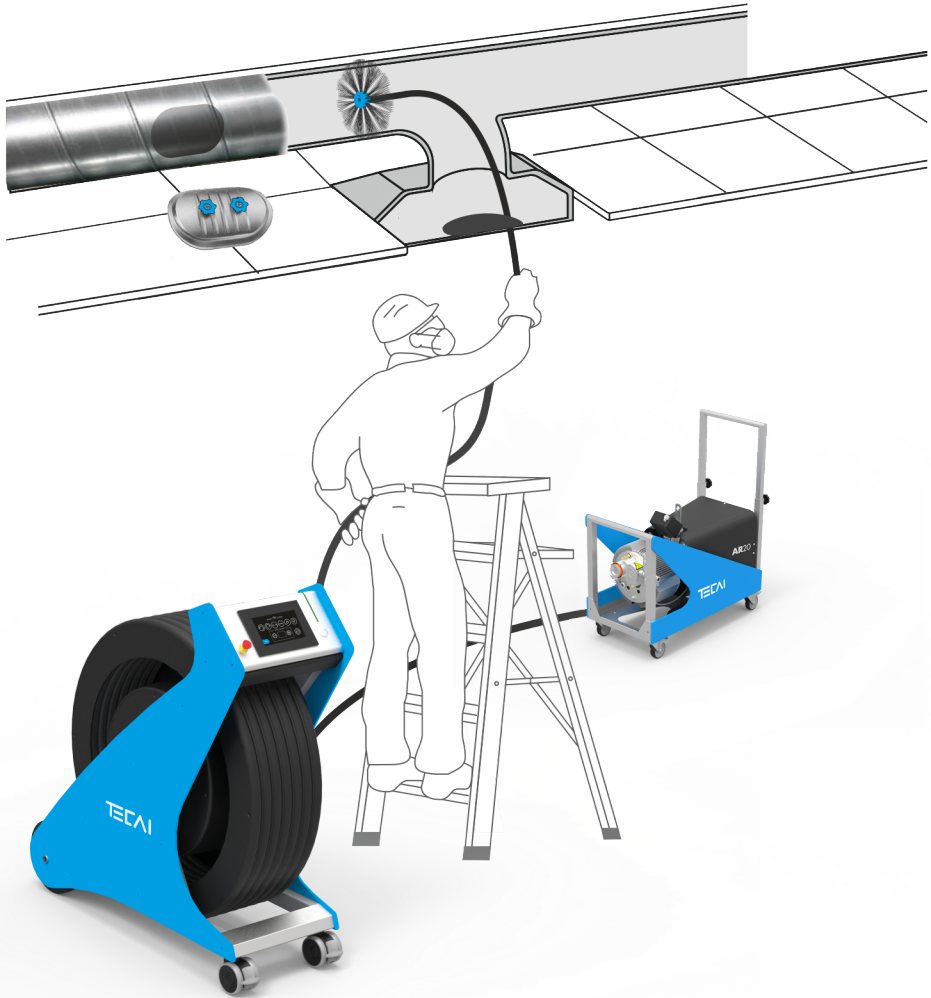
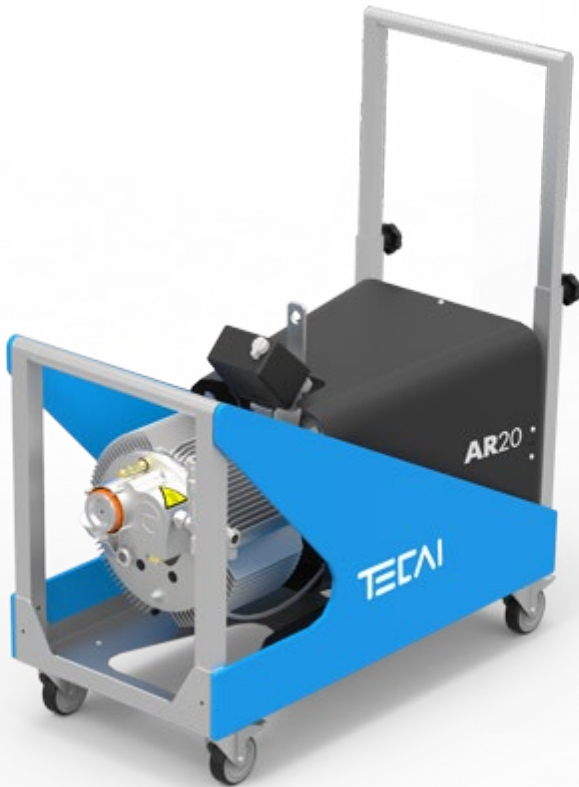


MULTIBOT. Air duct cleaning robot + Cleaning module A100 Pages. 7-12

AR20

Compressed air generator for brushing robots

TECAI'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.



“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.

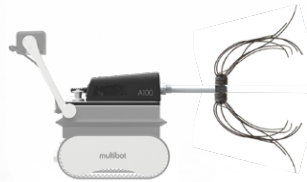
TECHNICAL FEATURES

Power supply	400V 50Hz	220V 50Hz	110V 60Hz
Min. power cable section	2,5 mm2 3,88 x 10 3 in2		
Nominal pressure	10 bar 145,04 psi		
Air delivery [5 bar 72,52 psi]	240 l/min 8,48 cfm		
Reception capacity	360 l/min 12,71 cfm		
Power	2,2 kW		
Sound level	70 dB		
Service temperature limit	5 - 40°C 41 - 104°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		

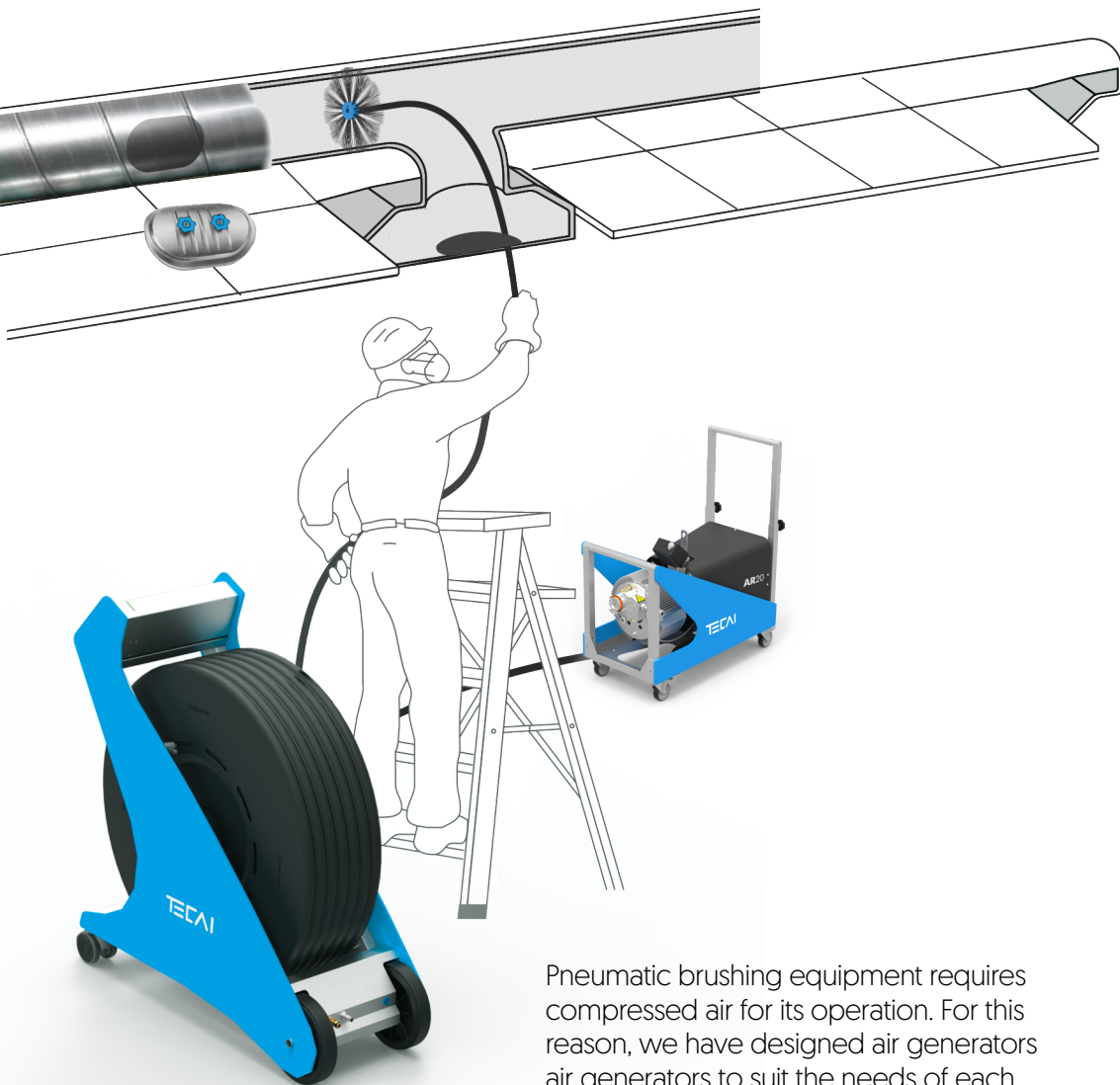
COMPATIBLE EQUIPMENT



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



MULTIBOT. Air duct cleaning robot + Cleaning module A100 Pages. 7-12

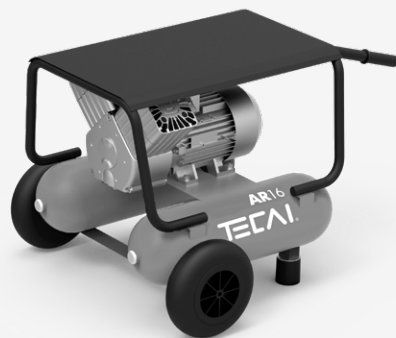


Pneumatic brushing equipment requires compressed air for its operation. For this reason, we have designed air generators to suit the needs of each piece of equipment. Our generators offer the right balance between air flow, low noise level for night work, and great portability so that your work is carried out in the best conditions.

AR16

AR20

AR18



	AR16	AR18	AR20
Power supply	220 V / 50 Hz	110 V / 60 Hz	400V / 3 / 50 Hz 220 V - 50 Hz 110 V - 60 Hz
Suction flow rate	400 l/min	370 l/min	360 l/min
Output flow rate	280 l/min [5 bar]	260 l/min [5 bar]	240 l/min [5 bar]
Deposit	18 l / 4,7 gal	30 l / 8 gal	Continuous work
Pression	10 bar	9 bar	10 bar
Operating principle	Piston	Piston	Palettes
Noise level	82 dB	79 dB	70 dB
Weight	44 kg / 97 lb	84 kg / 183 lb	50 kg / 110 lb
Dimensions [L x W x H]	572 x 636 x 520 mm 22,5 x 25 x 20,4 inch	1135 x 470 x 635 mm 44,5 x 18,5 x 25 inch	802 x 565 x 390 mm 31,5 x 22,3 x 15,35 in





PERSONAL PROTECTIVE EQUIPMENT

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 quick 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.



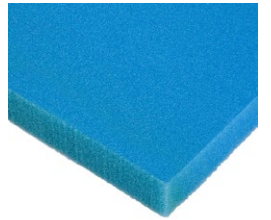
Adhesive film to cover grilles.

Allows a perfect suction of the air duct when cleaning. It measures 500 mm wide and 50 metres long.

AC3101150 1 unit
AC3101154 4 units
AC3101158 8 units

Foam board.

For duct section.



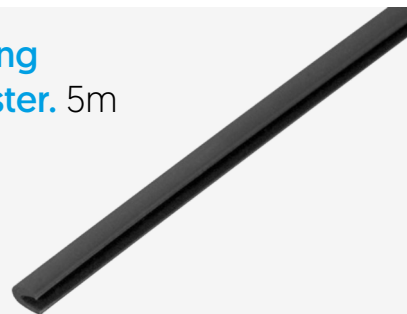
Foam sheet (1000 mm x 1000 mm x 60 mm) for duct section. Isolates the air conditioning ducts by sections for optimal cleaning.

HE7554100



PROTECTION OF CLEANING AREAS

Weatherstripping to protect register. 5m



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.

3,5 cm HE7400200
5,5 cm HE7400300

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.

50 mm x 15 m AC5207450
75 mm x 15 m AC5207475

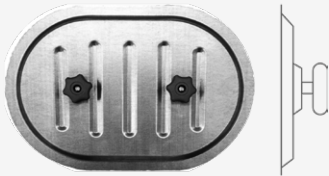


Inspection and cleaning registers.



It achieves a perfect seal thanks to its double body and fire resistant ceramic fiber gasket, with the metal knobs are suitable for compliance with current regulations.

Doors for flat ducts



INDIVISIBLE PACK OF 5/10 UNITS

- 200 x 100 mm. 10 Unid. AC6102010
- 250 x 150 mm. 5 Unid. AC6102515
- 300 x 200 mm. 5 Unid. AC6103020
- 400 x 300 mm. 5 Unid. AC6104030

Doors for curved ducts



INDIVISIBLE PACK OF 5 UNITS

- 250 x 150 mm Ø200/ Ø250 AC6112525
- 300 x 200 mm Ø315/ Ø355 AC6113035
- 300 x 200 mm Ø400/ Ø450 AC6113045
- 400 x 300 mm Ø500/ Ø560 AC6114056
- 400 x 300 mm Ø700/ Ø800 AC6114080
- 400 x 300 mm Ø630 AC6114063





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

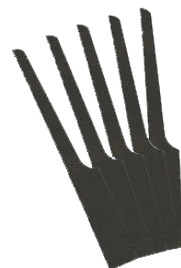
AC1012008 8 meter

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 units HE7100201

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.

AC3101500

Related equipment

ROTAIR | Pag.15-17



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. 13-14





Extensible stick.



Expansion stick for suction hose.

1 units

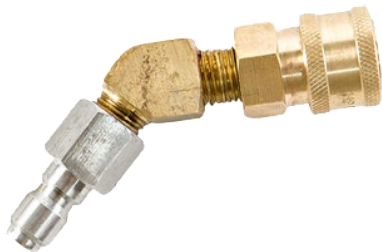
200 cm to 375 cm AC3101307

Nozzle adapters.



90° adapter for directing the nozzle

AC3303316

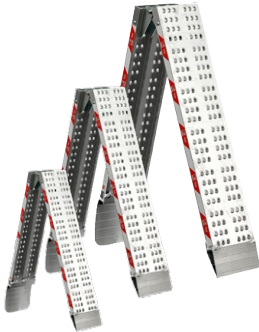


45° adapter for directing the nozzle

AC3303315



Folding aluminum ramps.

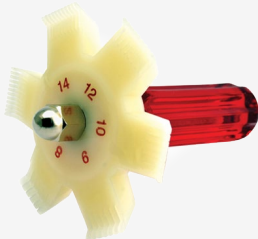


Ramp for easy access to ducts and other uses.

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

Coil comb.



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

HE7300110





CHEMICALS

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. 25



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. 25



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.

Jerrycan 10 liters PQ8400106

Related equipment

ECOIL | pag. 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 ecoil equipment, leave for a few minutes and rinse with plenty of water.

Jerrycan 10 liters PQ8400105

Related equipment

ECOIL | pag. 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

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 disinfection. 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. 7-12



Elasbio

Sealant for fiber ducts.



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

Jerrycan 25 Kg PQ8400110

Lead time 7/8 weeks. 40 units minimum order.

Related equipment

MULTIBOT | Disinfection module S360° | Págs. 7-12



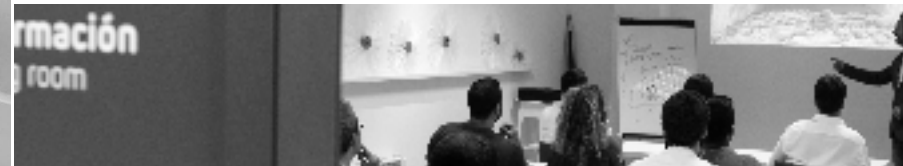


Training for technicians in the cleaning of air conditioning systems

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 system.

This course aims to cover the training needs of the sector, whose objective is that participants learn 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
- Occupational Risk Prevention Plan
- Business management
- 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

For 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



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