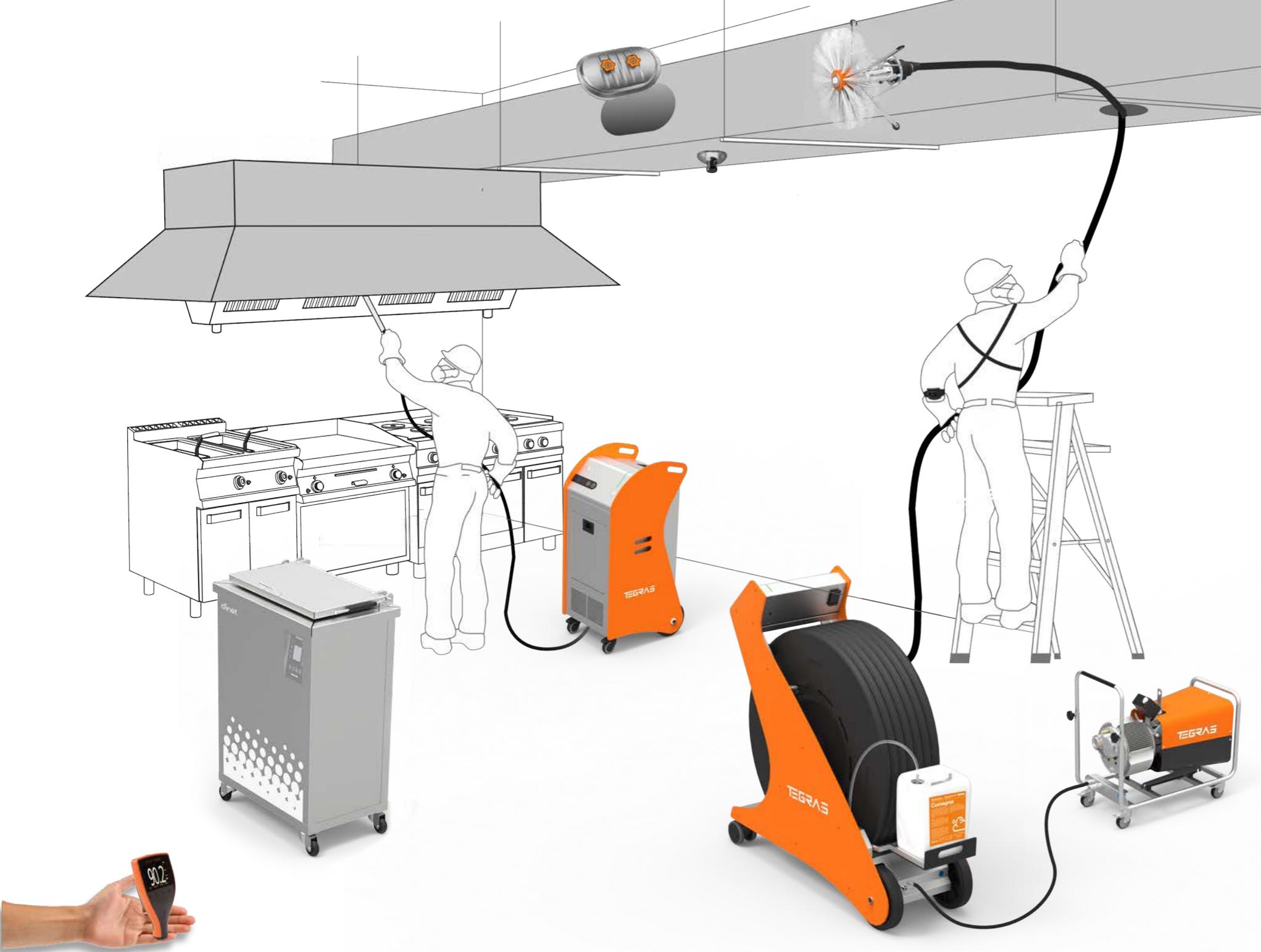


360°  
for your cleaning  
business in kitchen  
extraction  
systems



**01** DUCT BRUSHING ROBOTS.  
Pages. 4-13



**02** ACTIVE FOAM GENERATION AND CLEANING SYSTEMS. Pages. 14-19



**03** ULTRASONIC FILTER CLEANING SYSTEMS. Pages. 20-23



**04** DUCT INSPECTION EQUIPMENT. Pages. 24-26



**05** MEASURING INSTRUMENTS. Pages. 27



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**08** SPECIALIZED TRAINING PLANS. Pages. 40

# THE INVISIBLE ENEMY



How often do we hear about fires in restaurants in the news? The truth is that if we start to count them, we would be surprised. How often are we told what causes them? We will soon realise when we pay attention that it is never explained, but the main cause is always the same GREASE



Grease accumulates on the different elements of the kitchen's extraction system, and is always the element which triggers the fire, which makes it very dangerous, but in fact it is relatively easy to remove.



Apart from the fire hazard, grease is also the cause of other potentially dangerous risks, as it generates contamination and the proliferation of disease, mould, fungus and bacteria that can make us ill.



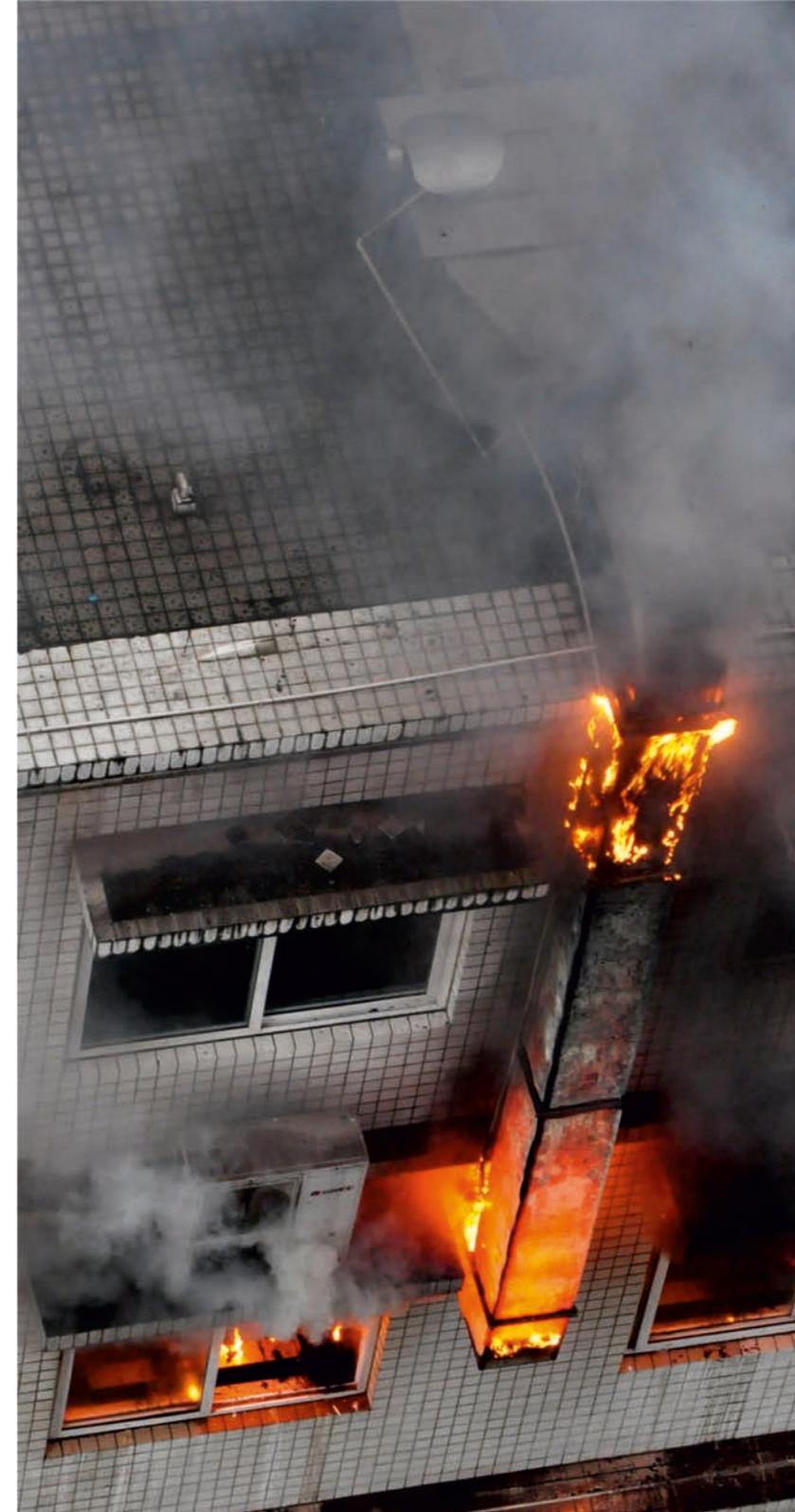
Grease also creates irritating smoke and bad smells that can have a negative effect on your clients' reputation, which is another reason, if not the most important, to make sure the extraction systems are thoroughly cleaned.



Anything else? Well, yes. Grease will build up and block the conduits, eventually paralyzing the extraction system, leading to a reduction in the performance of the installation and an increase in energy consumption.



A general in-depth cleaning of the kitchen extraction system, followed by posterior maintenance cleaning of the same, is the only guarantee of a healthy, safe installation.



# REGULAR CLEANING WOULD HAVE PREVENTED IT

Industrial kitchens are equipped with an extraction system designed to evacuate smoke and odors.

The extracted fumes carry a high degree of grease that accumulates in the filters, hood, ducts and extractor fan. This grease is highly flammable, and is responsible for most of the fires that occur in restaurants. In addition, dirty systems cause the fan to work forced, consuming more energy than necessary, generating bad odors, due to inadequate ventilation.

Periodic cleaning of these systems of these unnecessary risks unnecessary risks.

# 01

## DUCT BRUSHING ROBOTS

### PNEUMATIC ACTION

The brush robots were designed to make cleaning faster and more efficient inside the exhaust ducts, the force of the powerful pneumatic motor with the injection of alkaline foam makes cleaning easy even with the most stubborn grease.



# multi pro

## Exhaust duct cleaning system

Advanced pneumatic rotary brush unit, with integrated **active foam generator**, for the cleaning of kitchen exhaust ducts and industrial facilities.

### Integrated foaming system

Generates the active foam that adheres to the entire duct surface. There is no need for additional equipment.

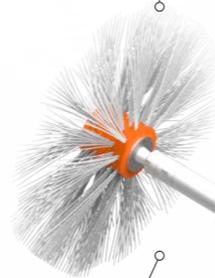
### Comegras storage

Place the degreaser container that generates the active foam.



### 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

Hose length

**30** m

### Self-leveling camera

Provide upright images at all times even when the camera is tilted. Visualizes and cleans at the same time. (Optional)





### WRIST REMOTE CONTROL

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

### OPTIONALES ACCESORIES ▼



#### WRIST REMOTE CONTROL

Operate by one person

AC3303604



#### BRUSH CENTERING DEVICE.

For ducts from 500 mm | 19.7 inch to 1000 mm | 39.3 inch

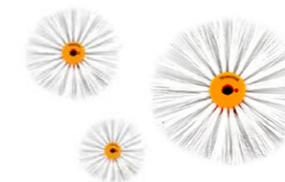
AC3303130



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

SV3331031 SV-MUL

### CONSUMABLES ▼



#### PACK 5 MIXED BRUSHES.

Steel +nylon. For carbonized grease. Ø200 | 300 | 400 | 500 | 600 mm. Ø7.8 | 11.8 | 15.7 | 19.7 | 23.6 inch

CP1302828



#### PACK 5 BRUSHES EXTREME.

Brushes for extreme cleaning. Ø300 | 400 | 500 | 600 /700 mm Ø11.8 | 15.7 | 19.7 | 23.6 | 27.5 inch

CP2300515

#### PACK 5 BRUSHES PBT.

Indicated for fatty residue of medium-high hardness. High abrasion power. Ø200 | 300 | 400 | 500 | 600 mm Ø7.8 | 11.8 | 15.7 | 19.7 | 23.6 inch

#### PACK 5 NYLON BRUSHES

Indicated for the removal of medium-hard grease. Ø300 | 400 | 600 | 700 | 800 mm Ø11.8 | 15.7 | 23.6 | 27.5 | 31.5 inch



#### COMEGRAS.

Ultraconcentrated degreaser. 10 kg | 22 lb Jerrycan.

PQ8100122

### TECHNICAL FEATURES

Motor supply [Maximum power]	Compressed air 300 l/min 8 bar   10,6 cfm – 8 bar
Rotation speed when empty	500 r.p.m.
Maximum torque	11,6 Nm   102,7 lbf.in
Noise level	< 70 dB
Direction of rotation	Right   Left
Control panel	HMI screen
Control system	Electropneumatic
Hose length	30 m   98 ft
Structure material	Stainless steel
Dimensions [L x H x W]	1244 x 430 x 1162 mm 49 x 17 x 46 inch
Weight	73 kg   161 lb

# forte

Exhaust duct cleaning system

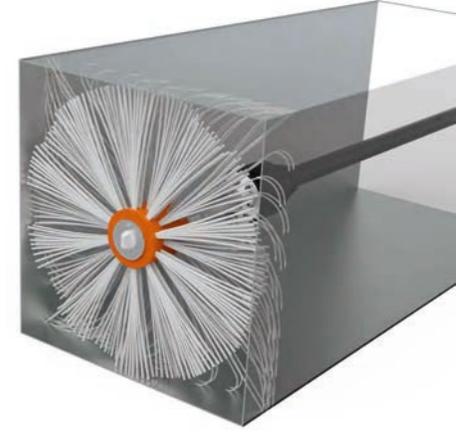
Pneumatic rotary brush unit, for the cleaning of kitchen exhaust ducts and industrial facilities up to 1000 mm | 39.3 inch of diameter.

- Powerful pneumatic motor [11.6 Nm max. torque] necessary for to remove all types of grease and dirt.
- 30 meters | 98.4 inch of semi-rigid hose that allows to work vertically [up and down], horizontally, and to make 90° bends.
- 100% stainless steel motor for greater durability and maintenance free.

## PNEUMATIC

For ducts up to  
**1000** mm

Rotary shaft length  
**30** mm



### Brushes

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

### Carrying handle

Easy handling for transportation.

### Shaft guard

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

### Dual direction of rotation

Left | Right





**IFOAM COMPACT**  
generates the active foam.

**COMEGRAS**  
Ultraconcentrated  
degreaser.

**AIR COMPRESSOR AR20**  
[Not included]

## OPTIONAL ACCESSORIES ▼

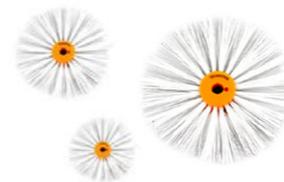


**BRUSH CENTERING DEVICE.**  
For ducts from 19.7 inch to  
39.3 inch  
AC3303130



**ANTI-BREAKAGE  
PROTECTOR** for the shaft  
and hose.  
AC3303112

## CONSUMABLES ▼



**PACK 5 MIXED BRUSHES.**  
Steel +nylon. For carbonized  
grease. Ø200 | 300 | 400 | 500  
| 600 mm Ø7.8 | 11.8 | 15.7 | 19.7  
| 23.6 inch  
CP1302828



**PACK 5 BRUSHES EXTREME.**  
Brushes for extreme cleaning.  
Ø300 | 400 | 500 | 600 /700 mm  
Ø11.8 | 15.7 | 19.7 | 23.6 | 27.5 inch  
CP2300515

**PACK 5 NYLON BRUSHES.**  
Indicated for the removal of  
medium-hard grease. Ø300 |  
400 | 600 | 700 | 800 mm  
Ø11.8 | 15.7 | 23.6 | 27.5 | 31.5 inch  
CP1101520

**PACK 5 BRUSHES PBT.**  
Indicated for fatty residue of  
medium-high hardness. High  
abrasion power. Ø200 | 300 |  
400 | 500 | 600 mm  
Ø7.8 | 11.8 | 15.7 | 19.7 | 23.6 inch  
CP1203030



**COMEGRAS.**  
Ultraconcentrated  
degreaser.  
10 kg | 22 lb Jerrycan  
PQ8100122



The centering device fixes the brush in the center of the duct.

## TECHNICAL FEATURES

Motor supply (Maximum power)	Compressed air 300 l/min 8 bar   10,6 cfm – 8 bar
Rotation speed when empty	500 r.p.m.
Par máx	6,5 nm   57,5 lbf.in
Maximum torque	11,6 nm   102,7 ibf.in
Maximum torque	< 70 dB
Direction of rotation	Right   Left
Panel de control	Pantalla HMI
Control system	Pneumatic
Hose length	30 m  98 ft
Structure material	Stainless steel and HDPE
Dimensions [L x H x W]	1025 x 1162 x 430 mm 40.3 x 45.7 x 17 inches
Weight	67 kg   147.7 lb



## Electric exhaust duct cleaning equipment

It performs the cleaning of the grease accumulated in exhaust ducts. It sprays active foam and brushes the duct. After a few minutes you can rinse for a perfect finish.

- It incorporates the Proaxis system, which minimizes shaft breakage during cleaning.
- Connected to the ifoam range of equipment, it allows you to inject the active foam which adheres to the entire surface of the duct.
- The remote control allows the equipment to be used by a single operator.

**ELECTRIC**

For ducts up to

**600** mm

Hose length

**15** m





## INCLUDED ACCESORIES ▼



**FLEXIBLE ROTARY SHAFT + LIQUID INJECTION.**  
 Ø 12 mm and length 15 m  
 AC3101212



**WRIST REMOTE CONTROL**  
 AC3303605

## CONSUMABLES ▼



**PACK x5 SQUARE DUCTS**  
 For square ducts Measurements: Ø250, 300, 350, 400 & 500 mm.  
 CP2300511



**COMEGRAS.**  
 Ultraconcentrated degreaser.  
 10 kg | 22 lb Jerrycan  
 PQ8100122

**PACK x5 PBT**  
 Grease grade 2 (medium soiling). Measurements: Ø200, 300, 400, 500 & 600 mm.  
 CP1203030

**PACK x5 MIXED. STEEL + NYLON.** Grease grade 3 (High soiling).  
 Ø200, 300, 400, 500 & 600 mm  
 CP1302828

## OPTIONAL ACCESORIES ▼



**CENTERING DEVICE**  
 Recommended to clean ducts from 400 to 600 mm  
 AC3101600

## TECHNICAL FEATURES eon

Power supply	230 V - 50 Hz 110 V - 60 Hz
Power supply	370 W máxima
Engine rotation speed	0 - 3000 r.p.m.
Engine operating speed	0 - 500 r.p.m.
Direction of rotation	Right / Left
Control system	Electric
Control panel	HMI screen
Hose length	15 m   50 ft
Structural 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

# ibrush

## Compact extraction duct cleaning system

### Maximum portability

This is a electric equipment, so it doesn't need an air compressor, which facilitates its use in places with poor accessibility.

### No more shaft breakage

Incorporates Proaxis technology that prevents shaft breakage during use.

### Versatility

In addition to kitchen extraction ducts, IBRUSH allows the cleaning of pipes, air ducts and industrial extraction systems up to 400 mm in diameter.

### Hood cleaning

The IBRUSH + IFOAM set of equipment allows you to clean the whole extraction system (ducts, plenum and hood).



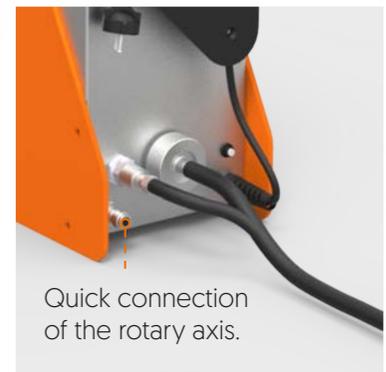
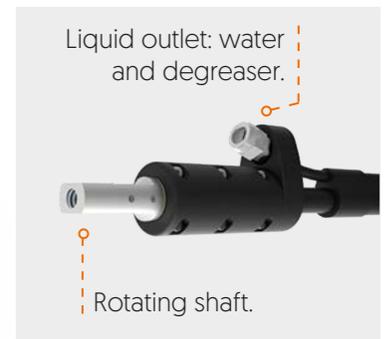
## ELECTRIC SYSTEM

For ducts up to

**400** mm

Rotary axis length

**7,5** m





### WRIST REMOTE CONTROL

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

### IBRUSH + IFOAM

IBRUSH requires connection with IFOAM, equipment to generate the active foam, which adheres to the wall of the ducts

IFOAM COMPACT generates the active foam.

COMEGRAS Ultraconcentrated degreaser.

### INCLUDED ACCESORIES ▼



**ROTARY FLEXIBLE SHAFT** Foaming, rinsing and brushing hose 7.5 m | 24,6 ft. long.  
AC3303608



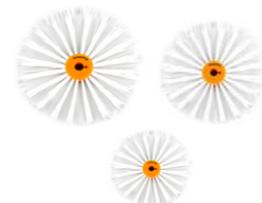
**WRIST REMOTE CONTROL.**  
AC3303605



**ROTATING SHAFT TRANSPORT BAG.**  
AC3101210



### CONSUMABLES ▼



**PACK 4 NYLON BRUSHES** Indicated for the removal of medium-hard grease. Ø200, 300 | 350 | 400 mm.  
CP2400512



**COMEGRAS** Ultraconcentrated degreaser.  
10 kg | 22 lb Jerrycan  
PQ8100122

**PACK 4 PBT BRUSHES.** For fatty residue of medium-high hardness. High abrasion power. Ø200 | 300 | 350 | 400 mm.  
CP2400513

**PACK 5 MIXED BRUSHES.** Steel + nylon. For carbonized grease. Ø200 | 300 | 350 | 400 mm.  
CP2400511

**PACK 4 SQUARE DUCT BRUSHES.** Ø250 | 300 | 350 | 400 mm.  
CP2500511

### TECHNICAL FEATURES

**ibrush**

Hydraulic power	Minimum pressure 2 bar - 29 psi
Maximum output pressure	6 bar   87 psi
Motor rotation speed	0 - 3000 r.p.m.
Rotation speed	0 - 500 rpm
Turning system	Right   left
Control panel	Membrane keypad
Control system	Electric
Engine power	0,37 kW   0,5 HP
Sound level	Inferior a 70 dB
Shaft length	7,5 m   24.6 ft
Structure material	Stainless steel and HDPE
Dimensions [L x H x W]	436 x 457 x 217 mm 17 x 18 x 8.5 inch
Weight	14,5 kg   32 lb



**COMPARATIVE  
Brushing equipment**



**HOSE  
SEMI-RIGID - FLEXIBLE**

Allows foaming, brush rotation and rinsing inside the ducts.



**REMOTO CONTROL**

Allows a single operator to control the equipment.



**VIDEO  
INSPECTION**

Built-in video video inspection system. Inspect & record in real time in HD.



**CENTERING DEVICE**

Fix the brush in the center of the of the duct for more efficient cleaning



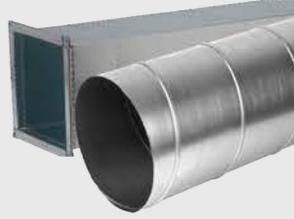
**ELECTRIC OR  
PNEUMATIC**

The pneumatic system requires an air compressor for its operation



**BRUSHES**

System that allows effective brushing in the corner for square ducts.



**DUCT SHAPES**

Square  
Circular



**multipro**

30 meters  
SEMIRIGID

OPTIONAL

OPTIONAL

OPTIONAL

PNEUMATIC

OPTIONAL

Ø100 to 1000 mm



**forte**

30 meters  
SEMIRIGID

✗

✗

OPTIONAL

PNEUMATIC

OPTIONAL

Ø100 to 1000 mm



**eon**

15 meters  
FLEXIBLE

✓

✗

OPTIONAL

ELECTRIC

OPTIONAL

Ø100 to 600 mm



**ibrush**

7,5 meters  
FLEXIBLE

✓

✗

✗

ELECTRIC

OPTIONAL

Ø100 to 400 mm

# 02

## ACTIVE FOAM GENERATION SYSTEMS

### THE POWER OF ACTIVE FOAM

Chemical action is a fundamental ingredient in the elimination of grease and dirt from any type of surface. The active foam effect enables adherence on vertical surfaces, increasing the contact time with the grease.

The iFoam equipment generates the active foam and high performance rinsing to terminate the chemical action in the process of cleaning exhaust systems

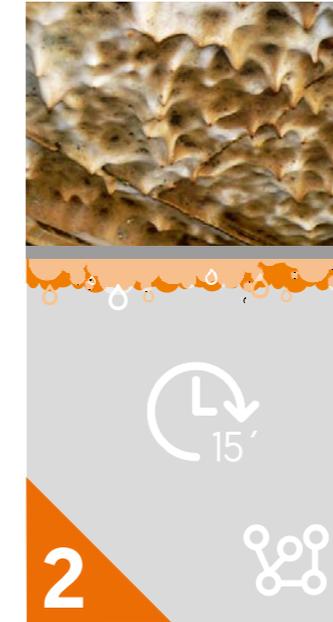


## THE FOAM ACTIVE PROCEDURE



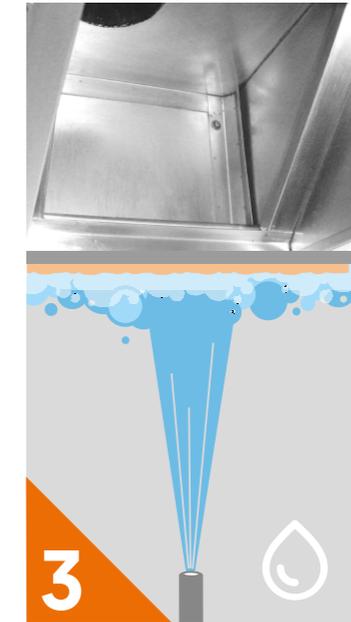
### FOAM INJECTION

The ifoam system sprays active foam into the greasy surfaces, achieving adherence even on vertical surfaces, for the chemical product to remain in permanent contact with the grease



### MOLECULAR DISSOLVE

This is the active part of the chemical solution. The effect is to dissolve the grease molecules [the dense foam dilutes and draws off the grease]. The whole process takes just 15 minutes and can be observed by seeing how the white foam is stained orange by the grease.



### RINSING WITH WATER

Once the active foam effect has finished we only have to rinse with the injection of water at high pressure, a process that will remove all of the mixture of foam with the dissolved grease. The result is surfaces that are perfectly clean and free of grease.

# ifoam PRO

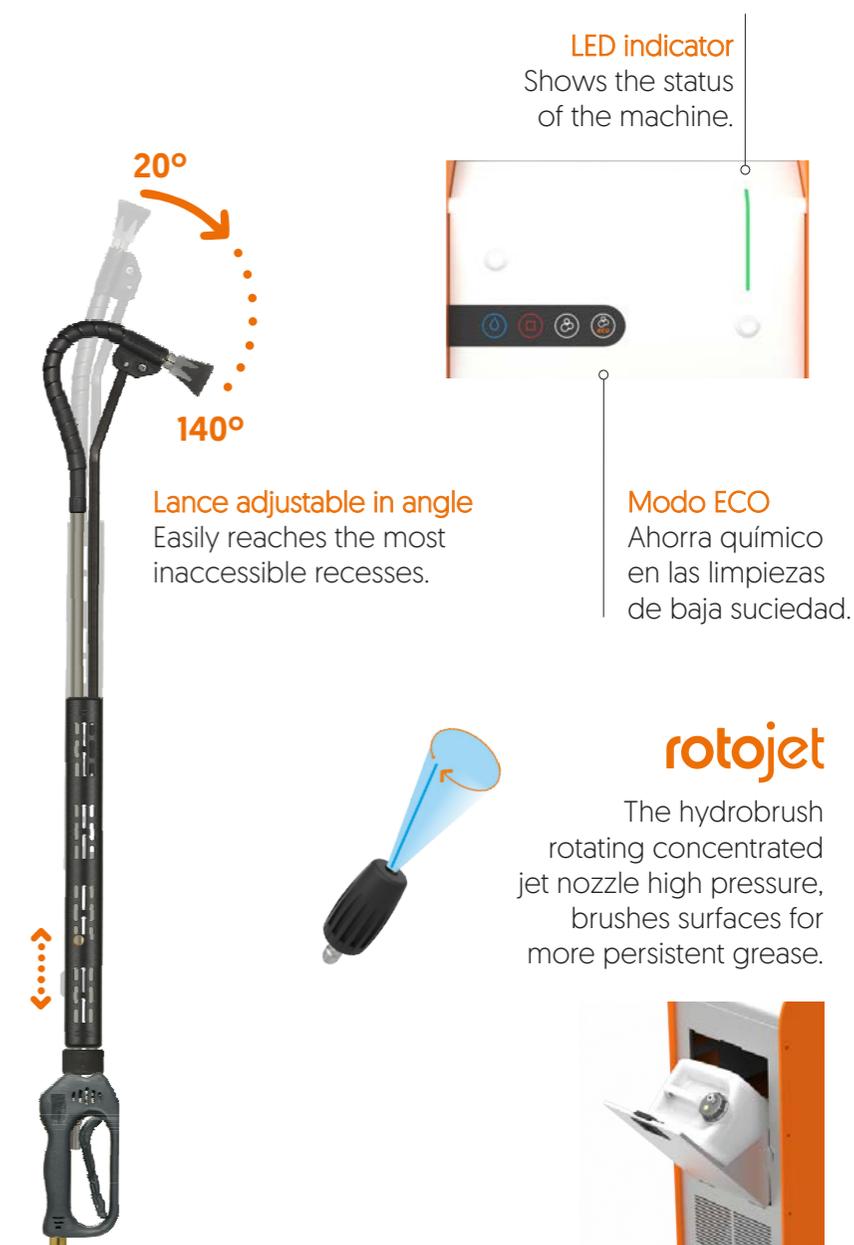
## Active foam Intelligent generator

iFoam Pro provides everything you need to clean hoods, plenums, and exhaust system motors in a single unit.

- **Multijet system.** It automatically regulates all the parameters of the degreasing foam generation, guaranteeing perfect adherence of the chemical to any surface for effectively dissolving grease.
- Rinsing and foaming at **high pressure** [150 bar]
- Power and speed for **cleaning large surfaces.**



TG3320150 | 230V - 50/60Hz  
TG3320151 | 110V - 50/60Hz



**LED indicator**  
Shows the status of the machine.

**Lance adjustable in angle**  
Easily reaches the most inaccessible recesses.

**Modo ECO**  
Ahorra químico en las limpiezas de baja suciedad.

## rotojet

The hydrobrush rotating concentrated jet nozzle high pressure, brushes surfaces for more persistent grease.

**Removable front panel for Chemical Carafe** system that guarantees a comfortable and safe handling.





## THE EQUIPMENT INCLUDES ▼



**ADJUSTABLE LANCE.**  
Foam injection and high pressure rinsing

AC3303340 + AC3303343



**10 METER HOSE**  
High pressure liquid connection 10 m

AC3303220



**ROTATING NOZZLE ROTOJET.** High pressure rinsing

AC3101210

## APPLICATIONS ▼



Campana



Estractor

## OPTIONAL ACCESORIES ▼



**HOSE REEL FOR MAINS WATER.**  
10 m

HE7300200



**UNIVERSAL TAP ADAPTER.**

AC6200003



**TAP CONNECTION FOR THREADED SOCKETS.**

AC6200005

## CONSUMABLES ▼



**COMEGRAS**  
Ultra-concentrated degreaser.  
Jerrycan 10 kg  
PQ8100122

## TECHNICAL FEATURES

ifoam<sup>PRO</sup>

Electric power supply	230 V 50Hz	110 V 60 Hz
Power consumption	10,7 A	21,4 A
Power	2350 W	1500 W
Hydraulic supply Maximum temperature	Min. pressure .1 bar   14,5 psi - 60°C   140 F	
Hose length	10 metros   33 ft	
High pressure pump	150 bar 2175 psi	150 bar 2175 psi
Low pressure pump	8 bar   116 psi	
Noise level	< 70 dB	
Control panel	Membrane keyboard	
Structure material	Stainless steel & HDPE	
Dimensions [L x H x W]	570 x 430 x 1040 mm 22.5 x 17 x 41 inch	
Unloaded weight	55 kg   121 lb	



# ifoam COMPACT

Portable active foam generator

For cleaning hoods, extractors and greasy surfaces.

Perfect for the most inaccessible places, such as rooftops.



## APPLICATIONS ▼



## ACCESSORIES INCLUDED ▼



Low pressure foam injection and rinsing lance 60 cm

**LIQUID HOSE.**  
8 m length

AC3303301

AC3303221

## OPTIONAL ACCESORIES ▼



**ADJUSTABLE LANCE.**  
Foam and rinse lance.  
127/139 cm

**HOSE REEL FOR MAINS WATER.**  
10 meters

AC3303341

HE7300200

## CONSUMABLES ▼



**COMEGRAS**  
Ultraconcentrated degreaser . Jerrycan 10 kg.  
PQ8100122



## TECHNICAL FEATURES

ifoam  
COMPACT

Electric power supply	220 V - 50Hz 110 V - 50/60 Hz
Max power	325 W
Max. output pressure	5,5 bar   80 psi
Control	Three-position switch
Connections	Quick connectors
Structure material	Stainless steel & HDPE plastic
Dimensions [L x H x W]	456 x 522 x 216 mm 18 x 20,6 x 8,5 inch
Unloaded weight	17 kg   37,48 lb

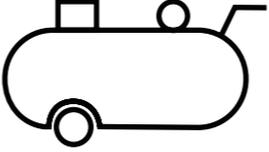


**COMPARATIVE**  
ifoam Pro  
ifoam Compact

  
**CLEARED IN HIGH PRESSURE**  
150 bares

  
**ECO MODE**  
Optimization of degreaser consumption

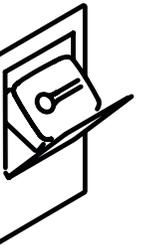
  
**ADJUSTABLE LANCE**  
Reaches the most inaccessible recesses

  
**COMPRESSOR**

  
**ROTATING NOZZLE**  
Hydrobrushing

  
**MEASURES**

  
**WEIGHT**

  
**CHEMICAL COMPARTMENT**  
Incorporates compartment for degreaser



✓

✓

✓

INTEGRATED

✓

[L x A x Al]  
570 x 430 x 1040 mm  
22.5 x 17 x 41 in

55 Kg

✓



✗

✗

OPTIONAL

INTEGRATED

✗

[L x A x Al]  
456 x 522 216 mm  
18 x 20.6 x 8.5 in

17 Kg

✗

# HP15

## High-pressure water cleaner

Professional high-pressure equipment, small on the outside and big on the inside, it has a triplex pump with a stainless steel piston and a ceramic coating, allowing it to work continuously. With its 160 bar pressure, it is able to remove the most persistent grease from any surface of industrial kitchen hoods and extractor fans. Great portability. Its small size allows it to be carried in one hand, or it can be mounted on a trolley for convenience.



### APPLICATIONS



Hood



Extractor fan

Pump supplied triple-cylinder in stainless steel with cladding ceramic



Easy to transport with one hand, the team separates of the car to get to the most remote places.

### STANDARD EQUIPMENT



TROLLEY



HOSE 8m



PISTOL GRIP + LANCE

### OPTIONAL ACCESSORIES



**ADJUSTABLE LANCE**  
to an angle of 20° to 140°  
AC3303340



**ROTARY PRESSURE CLEANING NOZZLE**  
360° of high pressure  
AC3303310



**WATER HOSE**  
15 m extension  
HE7300200

### TECHNICAL SPECIFICATIONS **HP15**

Power supply	220 / 240 - 50 Hz 120V - 60Hz
Working pressure	150 bar
Max output pressure	160 bar
Caudal	8,5 l/min
Power cable length	5 meters
High pressure hose	Steel reinforcement
Piston head material	Ceramic
Cylinder material	Brass
Dimensions [L x H x W]	460 x 280 x 260 mm 18 x 11 x 10,2 inches
Weight	24 kg   53 lb

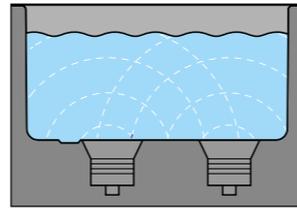


# 03

## ULTRASOUND CLEANING

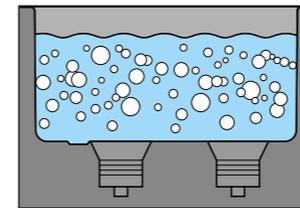
Ultrasounds are waves transmitted at frequencies which in general are beyond the range detected by human ears, and in some applications (sonic system) can be used to clean materials and pieces. It works like this:

1



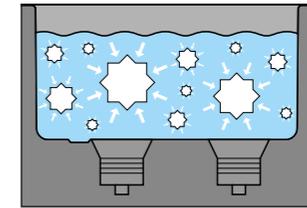
As the sound waves emitted by the transducers spread out in the solution with water and the chemical product in the tank, they produce alternating high and low pressure in the solution.

2



Millions of microscopic bubbles are formed and expand in the low-pressure stage. This process is known as CAVITATION, which means "formation of cavities".

3



The bubbles collapse and implode in the high-pressure stage, releasing enormous amounts of energy. These implosions act like a small army of tiny cleaning brushes. They work in all directions, attacking all the surfaces and invading all the hollows and apertures.



# filnet B100

ultrasonic

## Portable ultrasonic cleaning equipment

Do you want to stand out when cleaning filters? Do you need to clean in minimum time? Only with FILNET Ultrasonic will you achieve effective cleaning in only a few minutes. Do you want to complement your kitchen extractor system cleaning business by offering a single service? FILNET Ultrasonic offers you the latest technology for cleaning kitchen filters and equipment in minimum time.

✓ Capacity for 4-5 kitchen filters simultaneously



### 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

filnet B100  
ultrasonic

Power supply	220 V 50-60 Hz	110 V 60 Hz
Ultrasonic power	1200 W	900 W
Heating power	2000 W	1000 W
Number of transducers	28 kHz	
Ultrasonic frequency	24 units	
External dimensions	800 x 530 x 1060 mm 31,5 x 20,8 x 41,7 inch	
Interior dimensions	530 x 290 x 550 mm 20,8 x 11,4 x 21,6 inch	
Interior volume	85 liters	
Weight	87 kg / 192 lb	



# filnet B300

ultrasonic

## Portable ultrasonic cleaning equipment

Do you want to stand out when cleaning filters?  
Do you need to clean in minimum time? Only with FILNET

Ultrasonic will you achieve effective cleaning in only a few minutes. Do you want to complement your kitchen extractor system cleaning business by offering a single service? FILNET Ultrasonic offers you the latest technology for cleaning kitchen filters and equipment in minimum time.

✓ Capacity for 14-15 kitchen filters simultaneously



## 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 amount 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 ▼



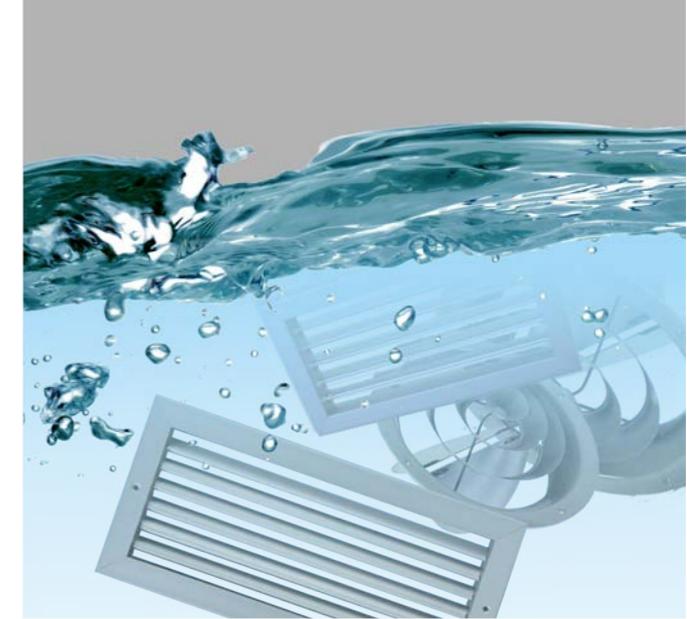
**SONICLEAN**  
Detergent for cleaning metal parts.  
Jerrycan 10 liters.

PQ8100501



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

PQ8200200



## TECHNICAL FEATURES

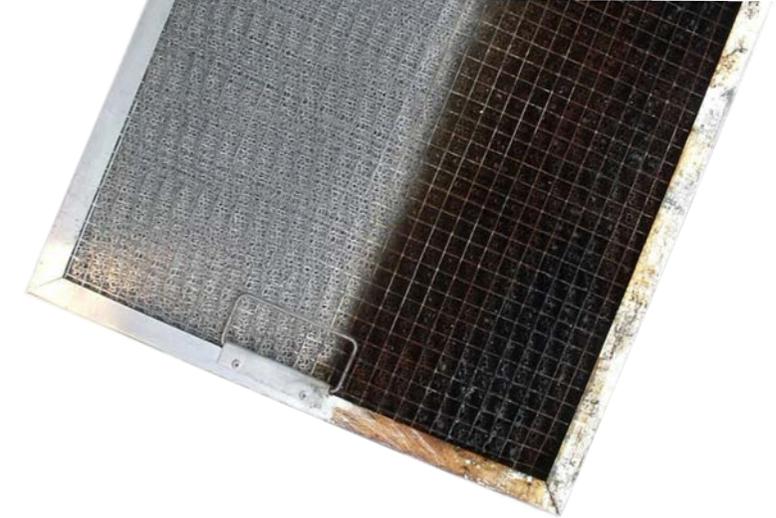
filnet B300  
ultrasonic

Power supply	3 phases 380V 50/60Hz	3 phases 240V 60Hz
Ultrasonic power	3000 W	
Heating power	6000 W	
Ultrasound frequency	28 kHz	
Number of transducers	60 uds.	
External dimensions	1050 x 825 x 1090 mm 41 x 32x 43 inch	
Interior dimensions	850 x 565 x 620 mm 33.5 x 22.2x 24.4 inch	
Interior volume	300 litros	
Peso	186 kg / 410 lb	





# COMPARATIVE ULTRASONIC CLEANING EQUIPMENT



**B100**



**B300**

## COMPARATIVE TECHNICAL CHARACTERISTICS

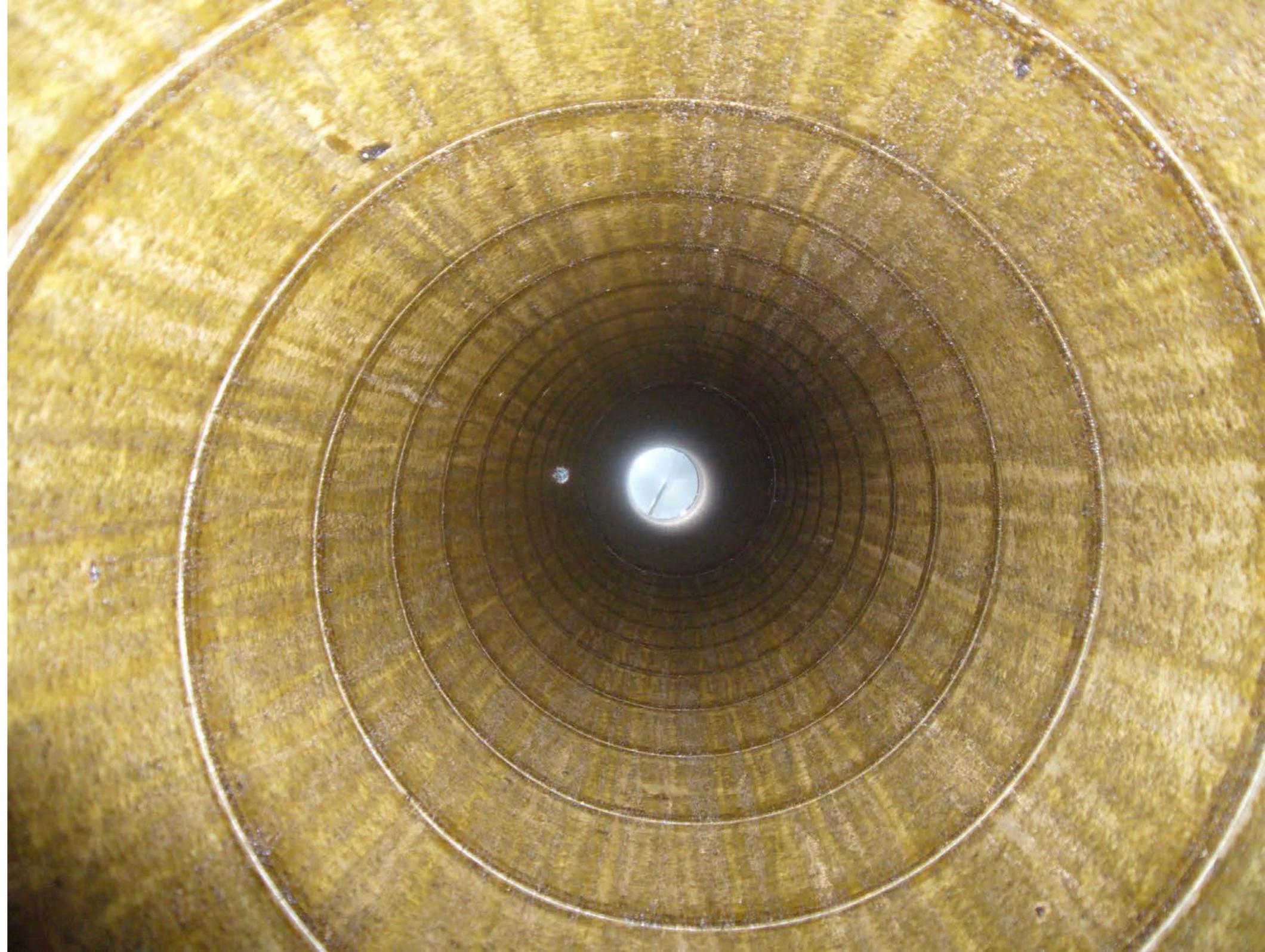
<b>filnet</b> ultrasonic	<b>B300</b>	<b>B100</b>	
Power supply	3 phases 380 V/56-60Hz 3 phases 240V /60Hz	220 V 50-60 Hz	110 V 60 Hz
Ultrasound power	3000 W	1200 W	900 W
Power generator	SWEEP SYSTEM regulable		SWEEP SYSTEM regulable
Adjustable control panel	Power		Power
Heating power	6000 W	2000 W	1000 W
Structure material	Stainless steel Thermal insulation		Stainless steel Thermal insulation
Empty weight	186 kg / 410 lb	87 kg / 192 lb	
External dimensions	1050 x 825 x 1090 mm 41 x 32x 43 inch	800 x 530 x 1060 mm 31,5 x 20,8 x 41,7 inch	
Interior dimensions	850 x 565 x 620 mm 33.5 x 22.2x 24.4 inch	530 x 290 x 550 mm 20,8 x 11,4 x 21,6 inch	
Volume / Tank capacity	300 liters / 14-15 filters	85 literes / 4-5 filters	



# 04

## SEEING IS BELIEVING

The inside of kitchen exhaust systems are “out of sight”. So there is a need for a visual inspection system to assess and record conditions before and after cleaning, and thereby demonstrate to the client the excellent results of the work carried out.



# visionmax

## Portable video inspection system for extraction ducts

It is the video inspection tool prior to any cleaning intervention of fume extraction 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

Cámara LCD con cristal de zafiro, resistente a las ralladuras y sumergible ▶



### STANDARD EQUIPMENT ▼



ELECTRIC CHARGERS



RECHARGEABLE LI-ION BATTERY



CENTRATOR



WIRELESS REMOTE CONTROL



SD CARD

### CARACTERÍSTICAS TÉCNICAS

Power supply	Rechargeable LI-ION type 9-12 V
Camera features	1/3" Sony CCD Ø22mm with sapphire crystal lens
Viewing range	1000 mm
Camera angle of vision	140 °
Image resolution	800 x 480 RGB
Monitor	7" TFT-LCD Color
Sealing (Camera)	Submersible to 20 m in water
Illumination	12 white LEDs of adjustable brightness
Charging time Battery duration	8 hours 7-9 hours
Camera cable length	30 meters
Dimensions [L x H x W]	517 x 434 x 200 mm 20.3 x 17 x 7.9 inch
Weight	14 kg / 31 lb

# 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



EXTENSION FOR  
CAMARA OF 1m  
AC3303404



640 x 480 px LCD display

### TECHNICAL FEATURES

Camera resolution	704 x 576 [PAL]
Resolución de pantalla	640 x 480
Screen resolution	4 batteries AA
Sealing (camera only)	IP-67
LCD screen	3,5" TFT-LCD
External power supply	5 V
Charging time	3 hours
Battery life	2 hours
Length of flexible shaft	1 m [extendable up to 4 m]
Dimensions [L x H x W]	256 x 95 x 153 mm [without flexible shaft]
Weight	530g

# grasmeter

Digital device for reading the thickness of grease deposits.

The GREASEMETER is a device for measuring the thickness of a deposit on a surface [grease, dust, industrial waste]. The meter should form part of the basic equipment of any technician, in order to determine the need for cleaning, or to check the result of an intervention. There are regulations that set an acceptable level of grease (<50 microns) and a threshold level (>200 microns) at which the entire system has to be cleaned.

## Advantages of the system

- Ergonomic design.
- External probe for easy measurement.
- Instant readings in real time.
- Large measurement range
- Template for surfaces.
- Standard calibrations.
- Membrane keypad.
- Bluetooth data transfer.
- Data analysis software.



Includes case for transportation ▼



## TECHNICAL FEATURES

Range of thickness readings	0 to 1500 microns
Screen	2,4" TF Color
Power supply	2 AA type batteries
Data transfer	USB to PC outlet Bluetooth connection
Measurement probe for grease deposits	500 mm cable and 8 mm base
Waterproof rating	IP-68
Dimensions [L x W x H]	141 x 73 x 37 mm 5,5 x 2,9 x 1,4 inch
Weight	160 g / 0,35 lb

# AR16

## Compressed air generator for cleaning fume extraction systems

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 ▼



**MULTIPRO.** Extraction duct cleaning equipment. Page. 5



**FORTE.** Pneumatic duct cleaning brushing robot. Page. 7

### TECHNICAL FEATURES

Voltage	230V   50Hz
Intake	22 KW
Intake	400 l/min
Output flow (5 bar)	280 l/min
Tank	18 litros
Pressure	10 bar
r.p.m.	2850 r/min
Noise level	82 dB
Number pistons	2
Phases	1
Weight	44 kg   97 lb
Dimensiones [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.



### COMPATIBLE EQUIPMENT ▼



**MULTIPRO.** Extraction duct cleaning equipment. Page. 5



**FORTE.** Pneumatic duct cleaning brushing. Page. 7

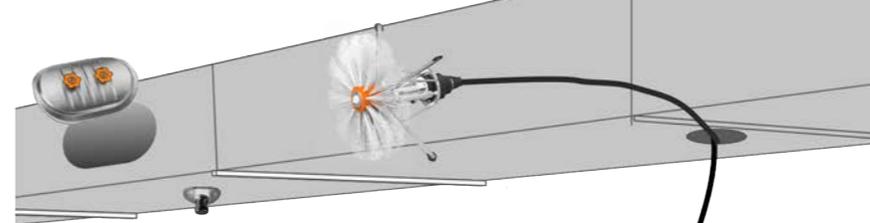
### TECHNICAL FEATURES

Power supply	110V - 60Hz
Nominal pressure	9 bar   125 psi
Caudal de aspiración	370 l/min
Output flow [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
Tank size	30 litres   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

# AR20

## Compressed air generator for brushing robots

TEGRAS'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 mm <sup>2</sup> 3,88 x 10 3 in <sup>2</sup>		
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 l   0,4 gal		
External structure 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 ▼



**MULTIPRO.** Extraction duct cleaning equipment. Page. 5



**ORTE.** Pneumatic duct cleaning brushing robot. Page. 7



# COMPARATIVE Compressors air compressors



## AR18



110V - 60 Hz

## AR16



230V - 50 Hz

## AR20



400V / 3 / 50Hz  
110V / 60 Hz | 220V / 50Hz

## COMPLETE TEAMS



MULTIPRO



FORTE

Power supply	110V - 60 Hz	230V - 50 Hz	400V / 3 / 50Hz 110V / 60 Hz   220V / 50Hz
Suction flow rate	370 l/min	400 l/min	360l/min
Outflow rate	260 l/min	280 l/min /5bar]	240 l/min [5bar]
Warehouse	30 l   8 gal	18 l   4,7 gal	Continuous work
Pressure	9 bar	10 bar	10 bar
Operating system	Piston	Piston	Pallet system
Dimensions [Lx Wx H]	1135 x 470 x 635 mm 44,5 x 8,5 x 25 inch	572 x 636 520 mm 22.5 x 25 x 20.4 inch	802 x 565 x 390 mm 31,5 x 22,3 x 15,35 inch
Weight	84 kg   183 lb	44 kg   97 lb	50 kg/110 lb





## PERSONAL PROTECTIVE EQUIPMENT

### Disposable coveralls.



Protective coverall for limited use [PE+PP] **impermeable to particles and splashes of limited intensity.**

Antistatic, water vapor permeable, resistant to tearing and abrasion, lint-free.

Protection against biological agents according to EN 14126:2003.

Size L - EP5600100  
Size XL - EP5600101

### Disposable mask

High filtration capacity Low inhalation 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 Good grip in any situation. Exceptional comfort due to special PVC formulation.

The long glove with heat-sealed cuff thermo-sealed cuff also protects you from splashes of liquids, from liquid splashes.



Short - EP5200100  
Long - EP5200200

### Silicone mask with two filters.



Manufactured in silicone, which avoids allergy discomfort comfortable fit and good resistance to aggressive environments. Special system of valve and filter holder in one piece, which gives body and rigidity to the front part of the mask.

EP5300200

### Silicone mask filter.



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

EP5300201 1 unit

### Protector facial + visor.



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

EP5100101

### Replacement protective visor.



EP5100200

**Rubber edge strip.**  
5 meters



To protect the contour of the open manhole open in the duct. Thanks to this protection, the hose of your duct cleaning system will not be damaged. 5 meters.



AC6134102

**Anti-breakage protector.**



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



AC3303112

**Fastening clamp.**



Fastening clamp to protective films for duct cleaning protection plastics in the cleaning of air-conditioning and extraction ducts.

3 cm HE7400200  
5,5 cm HE7400300

**Suction handle.**



Handle for attaching the protective plastic protection plastics during the cleaning process.

HE7400400

**Quick seal.**  
Tape for sealing ducts.



Extraction duct sealing tape. Prevents leakage of grease, liquids and bad odors.

---

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

**Plastic protector roll Galga 300.**



Transparent polyethylene film reel 3 meters wide and 100 meters long. Thickness Galga 300.

---

HE7400100

**Waste container with wheels and lid.**



Rectangular container for collecting and transporting cleaning waste.

Capacity: 120 liters.  
Weight: 10.5 kg.  
Material: polyethylene plastic.

---

750 x 400 x 710 mm AC3303207

**Tegras toolbox.**



Waterproof case to store accessories and tools for your Tegras machines

---

900 x 600 x 400 mm HE0000001

**Waterproof case.**



Waterproof case to store accessories and tools of your Tegras machines. Its portability and the fact that it is watertight, will facilitate the cleaning of your extraction systems.

---

440 x 420 x 150 mm AC3303403



## RELATED PRODUCTS

### VISIOPRO

Real time visualization & record.



Self-leveling camera provides horizontal images at all times, even when the camera is tilted.

The package includes the harness, camera and carrying case. Visualize and clean at the same time.

SV3331031 SV-MUL

#### Related equipment

MULTIPRO page. 5



### Pneumatic centering device for fume extraction ducts.



Accessory for centering the multipro and forte brush. It allows centering the brush in the duct and thus exerting equal pressure on the entire diameter

AC3303130

#### Related equipment

MULTIPRO page. 5

FORTE pag.e 7



of the duct, avoiding lurches. The wheels allow a better sliding and facilitates the handling of the hose by the operator



### Reversible pneumatic drill.



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

HE7100100



### Drill bit

HE7100101 Ø33 mm



### Tool air hose

AC1012008 8 meter

### Pneumatic jigsaw.



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



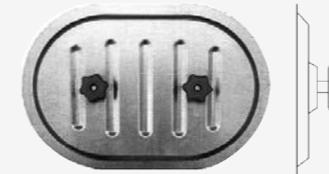
Pack 10 unidades HE7100201

### 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



RF 400°

#### INDIVISIBLE PACK OF 5 UNITS

- 250 x 150 mm AC6122515
- 300 x 200 mm AC6123020
- 400 x 300 mm AC6104030

### Doors for curved ducts



RF 400°

#### INDIVISIBLE PACK OF 5 UNITS

- 250 x 150 mm Ø200/ Ø250 AC6132525
- 300 x 200 mm Ø300/ Ø350 AC6133035
- 300 x 200 mm Ø400/ Ø450 AC6133045
- 300 x 200 mm Ø500 AC6133050
- 400 x 300 mm Ø600 AC6134060
- 400 x 300 mm Ø700/ Ø900 AC6134080

**Drains universals for drivers plane and curved.**



Drains made of stainless steel for the evacuation of chemical or other liquids during duct cleaning. Corrosion resistant and totally watertight material.



FLAT | CURVED

AC6203580 Ø200- Ø1000 mm

**Tube for duct drain**



Tube that connects the drainage of the conduit with the container where the waste is collected



AC6200002

**Pack of allen keys**



Pack of allen keys required for TEGRAS equipment

AC3303102

**Folding aluminium ramp.**



Ramp to facilitate access to ducts and other uses.

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



### Water hose extension.



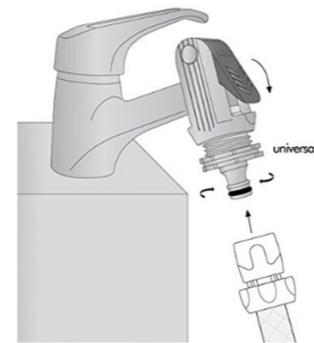
Allows water to reach your equipment no matter how far away the intake is. [10 meters].

HE7300200

### Universal tap adapter.



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



AC6200003

### Tap connection for threaded sockets.



Connect your liquid hose to a threaded faucet with this fitting.

AC6200005



## CHEMICALS

### SoniClean

Detergent for grilles and diffusers of air conditioning systems



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 litres PQ8100501

#### Related equipment

B100 ULTRASONIC page. 21 | B300 ULTRASONIC page. 22



### SoniPower.

Booster for grilles and diffusers



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 litres PQ8200200

#### Related equipment

B100 ULTRASONIC page. 21 | B300 ULTRASONIC page. 22



### Comegras.

Ultraconcentrated degreaser.



Effective ultra-concentrated degreaser for cleaning hoods, ducts and extractors with high or extreme degree of soiling.

Bag in box 10 kg PQ8100122

#### Related equipment

Multipro page 5 / ifoam Pro page. 17 / ifoam Compact page. 17



## Training for extraction system cleaning technicians

We have more than 20 years of experience working on the cleaning of extraction systems in industrial kitchens, as service providers in a first stage, and then as developers of the technology and methodology for this activity.

Our range TEGRAS 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 built an extraction system in our training center (canopy or hood, ducts and fan) and we will be using all of our equipment to practice and apply the methodology.

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 the extraction system, with better profitability and efficiency, thanks to the most advanced technology and procedures on the market.

de formación  
training room

### Theory (6h)

- Introduction to extraction systems
- Related regulations
- Facilities and particularities
- Grease types
- Grease level
- Evaluation of facilities
  - Inspection systems
  - Measuring systems
  - Cleaning frequency
- Cleaning procedure
  - Data collection
  - Methodology for hood cleaning
  - Methodology for duct cleaning
  - Methodology for filter cleaning
  - Methodology for fan / turbine cleaning
  - Case study: Methodology used of the Filtronic system
- Occupational Risk Prevention Plan
- Business management
- Annex. Glossary of terms

### Practice (2h)

- Preparing the facilities for cleaning
  - Environment protection
  - Prevention of labor risk (EH&S)
  - Opening access doors and drain plugs in ducts
- Equipment connection and start-up
- Using the TEGRAS machines
  - Cleaning the hood / canopy
  - Cleaning the ducts
  - Cleaning the hood filters
- Transport, storage y maintenance of equipment
- Inspections

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](mailto:info@teinnova.net)

teinnovacleaning.com

TEINNOVA®



INTERNATIONAL PRESENCE



OWN MANUFACTURING



TECHNICAL SERVICE



INNOVATION



TRAINING



SHOWROOM



\* Price list valid until 12/31/2023