



**ifoam** mini

Intelligent active foam generator



User manual

ENG



## introduction



Dear client:

Many thanks for having placed your trust in a quality product from TEINNOVA.

This product has been developed with modern manufacturing procedures and a range of measures in order to guarantee quality.

We endeavor to do everything possible so that you are satisfied with this product and can work with it without any problems.

If you have any questions about this product, please contact your distributor or contact our company directly.

Before starting the machine, carefully read the usage instructions for your equipment.

Consider this manual as part of the machine and always have it to hand for future queries.



## Training services

Our training services have been designed to support our clients in achieving their objectives and together we develop training programmes that suit their strategy.

We offer the possibility of providing companies with specific training for using our equipment and training their operatives so that they can perform the best service and thus contribute to the success of their end clients. This includes aspects such as knowing how to draft a good and objective budget, responding to specific problems that might arise or offering a more professional and efficient service.



## Technical service

Thanks to manufacturing the cleaning equipment ourselves we can control the quality and the performance of each machine we manufacture at all times. This has allowed us to have very low repair rates which have always been resolved by our own Technical Assistance Service in very short time frames. The service is managed by the same human team as the factory.

We have every type of replacement available for your equipment as well as related accessories.

[teinnovacleaning.com](http://teinnovacleaning.com)

☎ 902 885 955

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## symbols

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All of the graphic symbols shown in this manual as well as those indicated on the equipment itself are explained in this section. It is important to read the text relating to these symbols with special care as it concerns personal and equipment safety.



### DANGER!

This symbol warns of a potentially dangerous situation that could cause serious injuries or even death if the indicated instructions are not followed appropriately. Ensure that you read all the instructions described in the "Safety information" section.



### WARNING!

This symbol warns of a potentially dangerous situation that could either cause mild or moderate injuries or damage to property, causing personal injuries, if the indicated instructions are not followed appropriately.



### CAUTION!

This symbol warns of a situation that could cause damage to property without causing personal injuries if the indicated instructions are not followed appropriately.



### IMPORTANT NOTE!

This symbol warns of information relating to the optimal use of the equipment in order to avoid possible handling errors.

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## safety warnings

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- The IFOAM MINI equipment must NOT be used for anything other than the uses outlined in this instruction manual.
- Before starting up the equipment ensure that all electric and liquid connections are correct.
- Do not aim the stream from the lances at people.
- Take care to place your IFOAM MINI on a smooth and stable surface.
- Persons operating the IFOAM equipment must be sufficiently trained.
- It is advisable to use mechanical protection gloves and overalls when operating the equipment.
- It is mandatory to use complete facial protection equipment in order to avoid the possibility of chemical products splashing into the eyes of the operator.
- Adequately secure the IFOAM MINI in a vertical position and lock the wheels when transporting it in a vehicle.
- Do not open the back cover of your IFOAM MINI or tamper with any of the equipment's internal elements. In the event of a breakdown, get in touch with TEINNOVA's Technical Assistance Service on telephone number: +34 941 44 50 56.



# intended conditions of use

IFOAM MINI is a machine for generating and applying active foam and for subsequently rinsing with water. It is suitable for working in kitchens and food companies as well as for using tested aggressive chemical products. It can be used in flues and extraction hoods.

It can be used in combination with either a TEGRAS brushing robot or a manual lance as shown in the usage diagram.



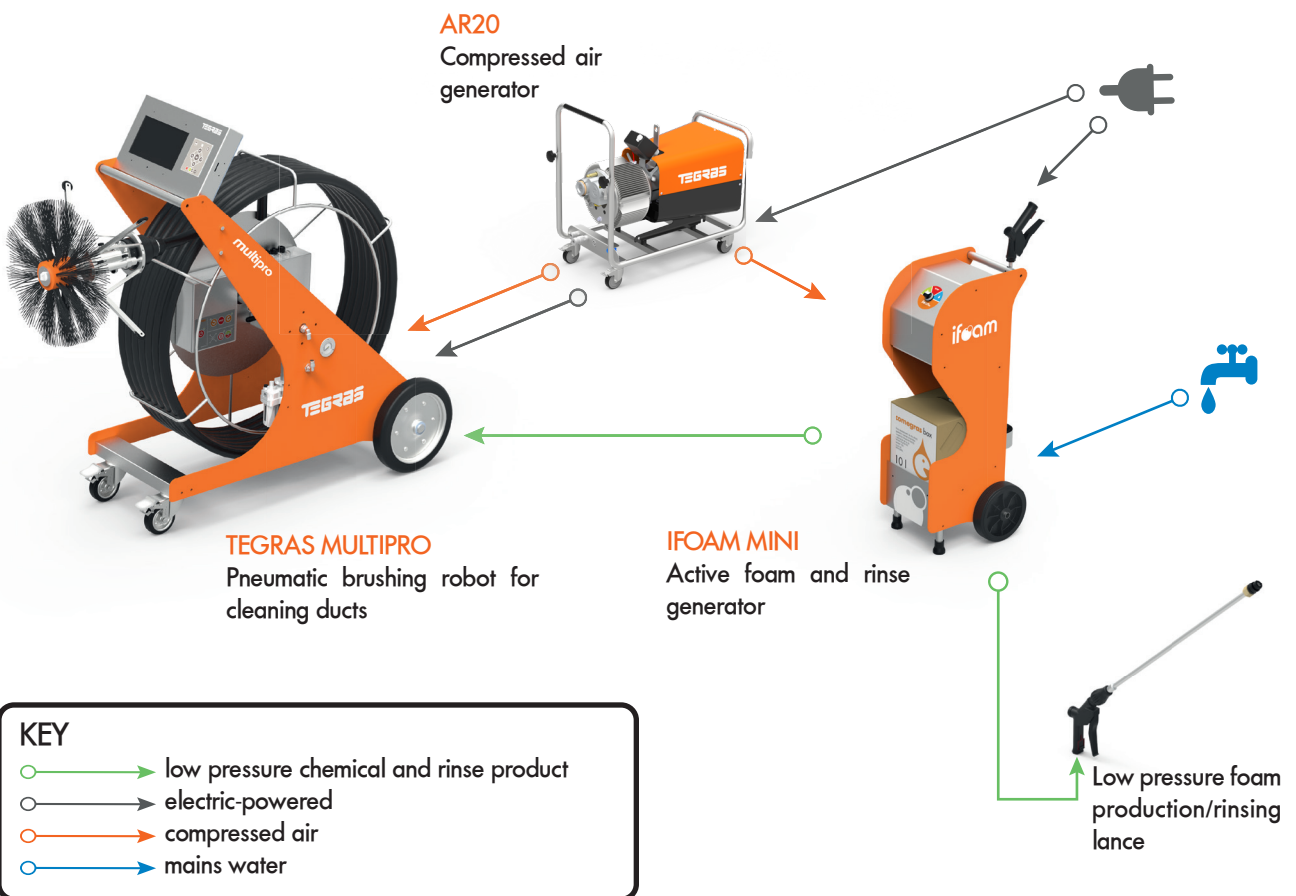
Any other use is completely prohibited without written authorisation from the manufacturer.



Do not, under any circumstances, place the IFOAM MINI in a horizontal position as this will cause the machine to break down.



Unless indicated otherwise, the degreasing chemical product shall be the one recommended by the manufacturer, COMEGRAS BOX. Using a different chemical will nullify the guarantee and might cause irreparable damage to your TEGRAS equipment.

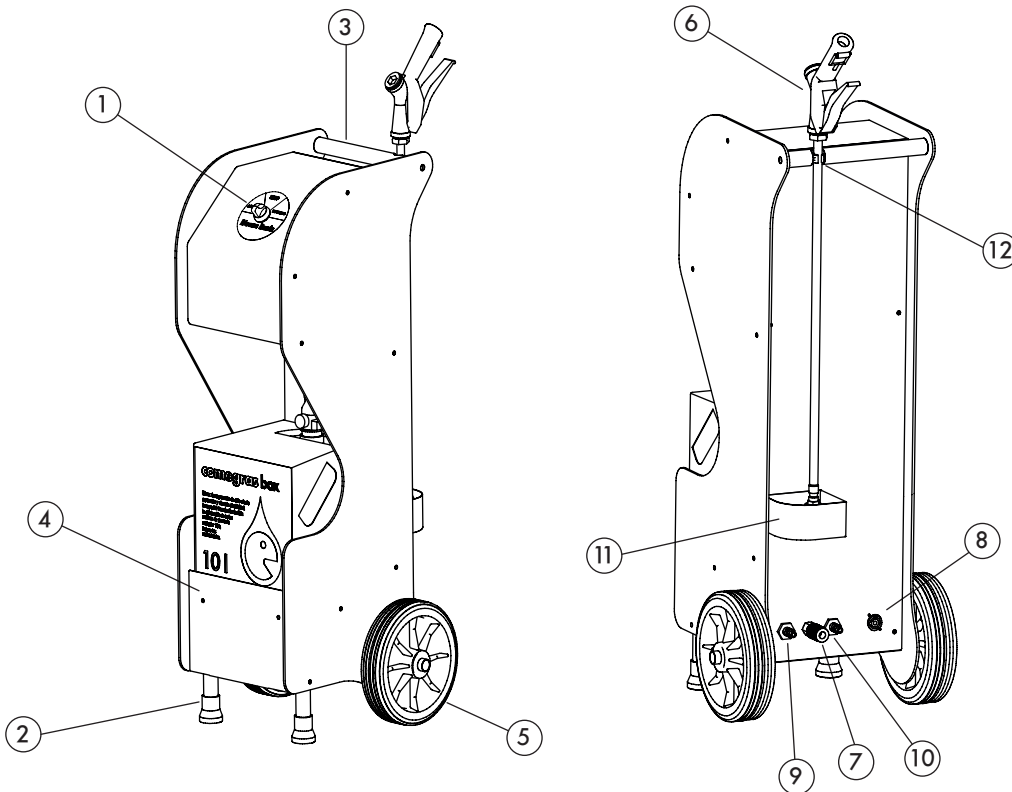




# get to know your

## Components:

- 1- Control panel
- 2- Front legs
- 3- Transport handle
- 4- Chemical compartment
- 5- Back wheel
- 6- Lance for low pressure
- 7- Foam/rinse exit point
- 8- Power outlet
- 9- Mains water outlet
- 10- Compressed air outlet
- 11- Lance support
- 12- Lance hook








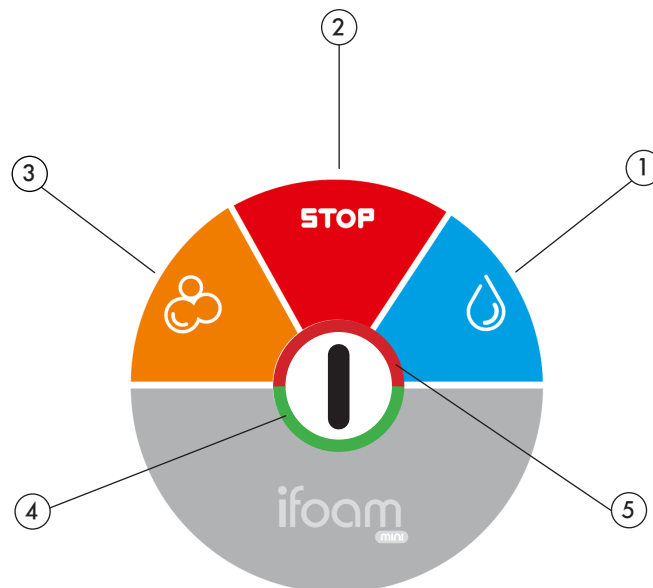




## control panel

### Main control panel:

①		Rinse option	Activate the rinse system by injecting water at 6 bar. This function should always be performed with the nozzle with four outlets.
②		Stopping the machine	Stop the functioning of the machine.
③		Foam option	Activate the foam creation system and its injection at 6 bar pressure. This function should always be performed with the foam nozzle.
④		Green LED	The green light will remain active throughout the entire operation indicating that the water inlet temperature is correct.
⑤		Red LED	The red light will appear only when the water inlet temperature exceeds 60°C. At the same time, the machine will be locked to prevent failure of internal components.





## accessories and related equipment

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### Accessories included for the low pressure system:

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#### **Low pressure 60 cm lance**

A 60 cm lance specifically for rinsing and producing foam at low pressure. It is included and integrated in the IFOAM MINI.

Code: AC3303301

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#### **Electric power supply cable**

1.5 8 metre cable. The IFOAM MINI power supply is effected through a specific connector. The connection to mains electricity corresponds to the standard outlet.

Code: 999330053

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#### **Compressed air supply hose**

An 8 metre hose with standardised connectors, specifically for supplying low pressure liquids to your TEGRAS MULTIPRO. The connectors correspond to those found on the equipment provided by TEINNOVA.

Code: AC3303101

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#### **iFoam low pressure liquid hose with brushing robot**

An 8 metre hose with standardised connectors, specifically for supplying low pressure compressed air to the low pressure lance supplied by Teinnova. The connectors correspond to those found on the equipment provided by TEINNOVA.

Code: AC3303221

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## accessories and related equipment

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### Optional accessories:

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#### **Hose reel for mains water**

A hose reel that makes it possible to supply your IFOAM MINI with mains water from an outlet far from the cleaning area. The length of the hose is 15 metres.

Code: HE7300200

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#### **Adapter for round taps**

Adaptor for connecting the mains water hose to round taps that supply the IFOAM MINI.

Code: AC6200004

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#### **Adapter for square taps**

Adaptor for connecting the mains water hose to square taps that supply the IFOAM MINI.

Code: AC6200003

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#### **COMEGRAS BOX chemical**

Chemical product for dissolving grease and disinfecting ducts.

Code: PQ8100121

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#### **AR10**

Twin opposed piston compressor that does not need oil and has a capacity of 70-78 litros/min. Silent, portable, light and compact equipment that provides an air supply that is free from oil which is ideal for your IFOAM MINI equipment.

220V 50Hz. Code: TG3330412

110V 60Hz. Code: TG3330410

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## accessories and related equipment

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### **Low pressure 90 cm lance**

A 90 cm lance specifically for rinsing and producing foam at low pressure.

It is not included in the IFOAM MINI.

Code: AC3303302

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### **Auxiliary tank 30l**

Liquid tank for transporting water in workplaces where there is no access to a mains water supply.

Code: AC3303206

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## accessories and related equipment

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Related equipment:

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### **TEGRAS forte**

Pneumatic brushing robot for cleaning ducts.

Code: TG3310102



### **TEGRAS multipro**

Electro-pneumatic brushing robot for cleaning ducts.

Code: TG3310202



### **AR20**

Vane compressor that generates an output of compressed air of 240 litres at 10 bar.

220V 50Hz. Code: TG3330201

110V 60Hz. Code: TG3330500



# operating instructions

## Steps to install the IFOAM correctly:

### 1 Connecting to mains electricity:

The connection will be made by means of an electrical connection cable that comes with the machine. This cable features a standard connector to mains electricity and an electrical supply connector (blue in colour) especially for the machine. Connect the cable to the mains electricity and then connect it to your IFOAM MINI. The connection to your IFOAM MINI is made by turning the blue connector to the right, as shown in the image.

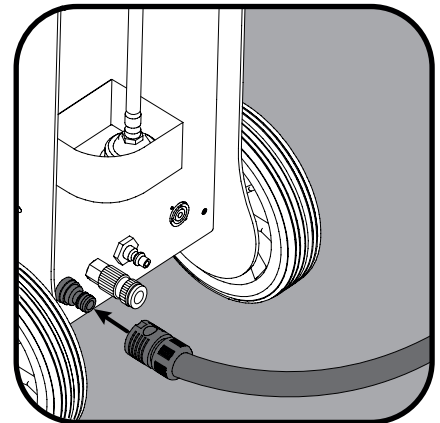


### 2 Connecting to a mains water outlet:

Connect the hose to a mains water outlet at a minimum pressure of 2 bar. There are adaptors for different taps which are offered as optional accessories. Connect the hose to your IFOAM MINI's water input connector.



The temperature at which the water enters the machine must not be greater than 80°C. If the water going into the machine is greater than 80°C, faults can occur in the equipment's internal components.





## operating instructions

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### 3 Connecting your IFOAM MINI to the compressed air generator:

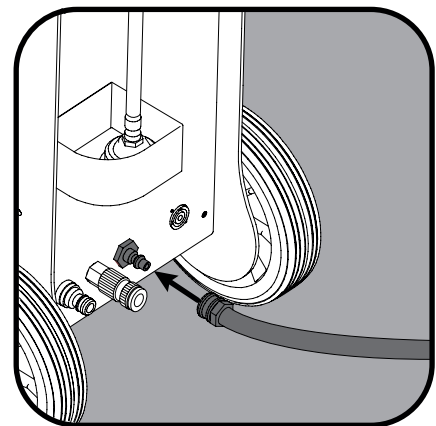
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The IFOAM MINI equipment must be used in combination with a compressed air generator for its foam production function. This compressed air generator should have a minimum provision of 80l/m at 5 bar. It is recommended to use a compressed air generator sold by TEINNOVA.

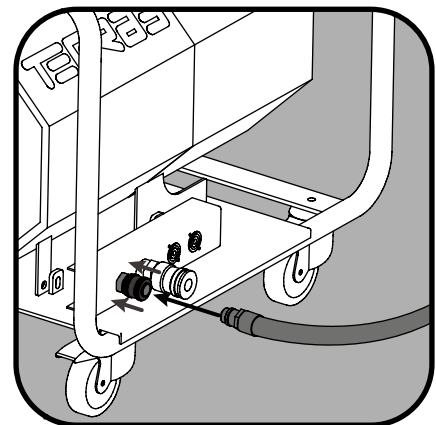
It is connected by means of a low pressure hose which is also used to connect the low pressure lance. The connection should be made when your IFOAM MINI is switched off.

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Connect the low pressure hose to your IFOAM MINI.



Connect the low pressure hose to the compressed air outlet on whichever compressor that is going to be used. In this image the connection is made with the AR20 compressed air generator.

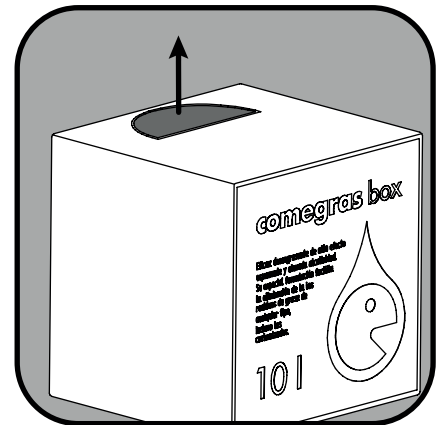




## operating instructions

### 4 Connecting the chemical:

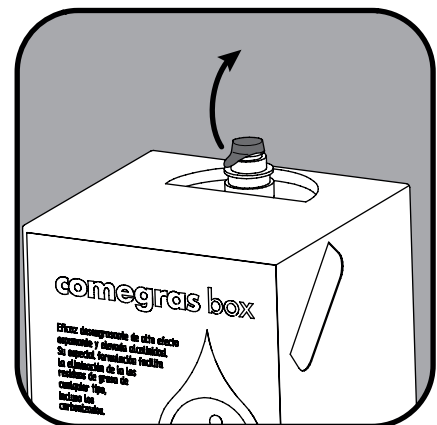
Remove the cut out from the Bag-in-Box where the chemical's nozzle will come out from.



Remove the cap from the nozzle in the Bag-in-Box as is shown in the image.



Failing to remove this cap when connecting the Bag-in-Box to your IFOAM MINI will cause damage to the machine.



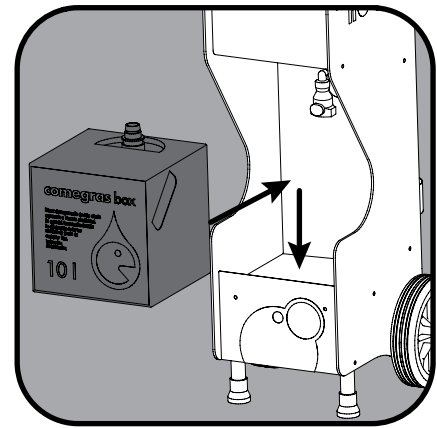




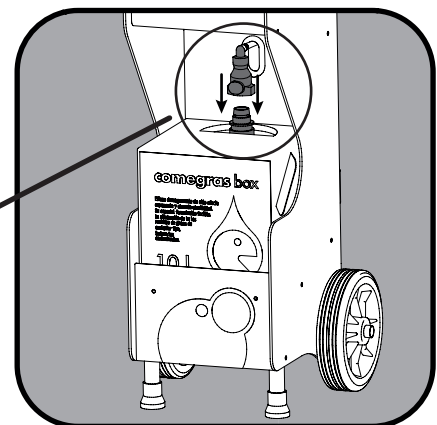
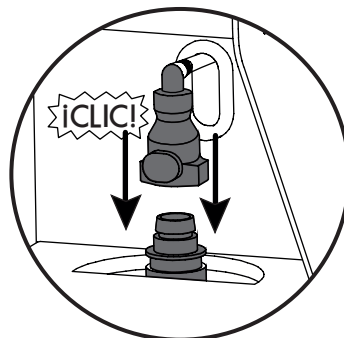
## operating instructions

### 5 Connecting the chemical:

Place the Bag-in-Box in the compartment and open the box, leaving the inside valve visible. Handle the box by using its side handles.



Push the machine's supply inlet down onto the chemical outlet nozzle until it clicks. This means it is correctly connected.



The first time the Comegras Box is connected to your IFOAM MINI it will take a few minutes for it to start taking in the chemical as it has to suck out all the excess air in order to create the vacuum. Once the vacuum is created the chemical will be sucked in continuously.



## operating instructions

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### 6 Using in low pressure mode:

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The IFOAM MINI's low pressure system can be connected to a lance for producing foam or rinsing and to a TEGRAS brushing robot. The connection will be selected depending on the function desired.

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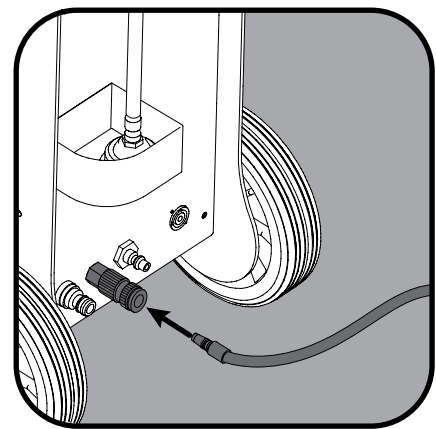
#### Connecting the low pressure lance:

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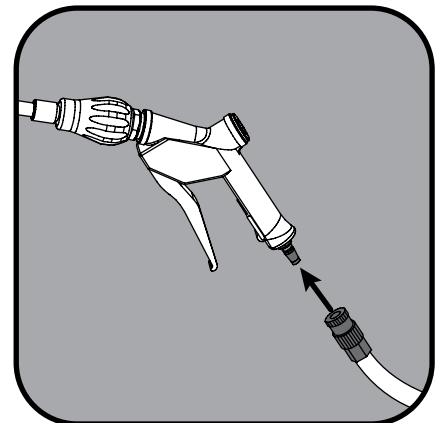
The low pressure lance allows the rinsing and foam production function. The connection is made directly to the machine by means of a hose that connects to the lower back part of the machine.

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Connect the liquids hose to your IFOAM MINI.



Connect the liquids hose to the low pressure lance.





## operating instructions

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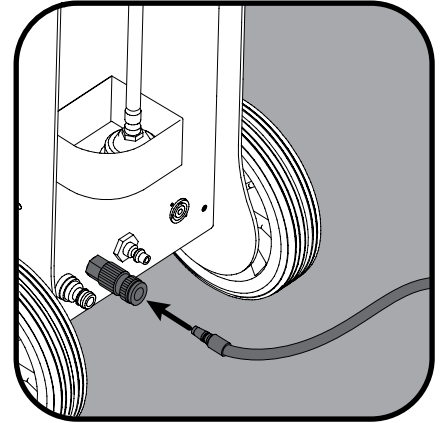
### 7 Using with TEGRAS brushing robot:

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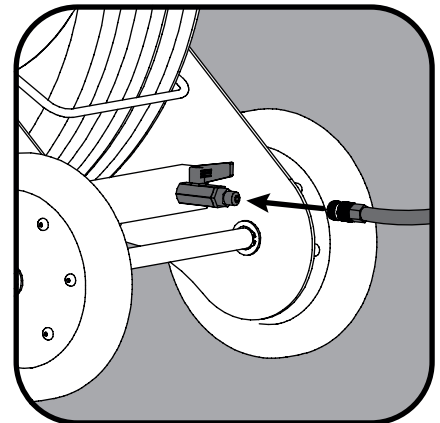
It is connected by means of a low pressure hose which is also used to connect the low pressure lance. The connection should be made when your IFOAM MINI is switched off.

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Connect the liquids hose to your IFOAM MINI.



Connect the liquids hose to the liquids inlet in the TEGRAS brushing machine.





## operating instructions

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### 8 Selecting the function to be performed:

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Your IFOAM MINI has a selector button which is used to select the function to be performed. The functions that can be performed with your IFOAM MINI are rinsing and producing foam.

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To produce foam, apply a layer of active foam and wait five minutes for the chemical to take effect. The foam production function corresponds to the icon in the image.



Rinse after five minutes. The foam production function corresponds to the icon in the image.



The final function to be performed must always be rinsing. This is to avoid chemicals remaining in the machine's conduits.

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After finishing the work, switch the machine off.





# operating instructions

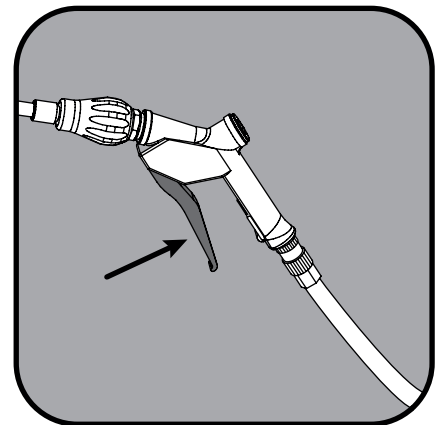
## 9 Switching off your IFOAM MINI:

After finishing the rinse, place the selector button in rinse mode.

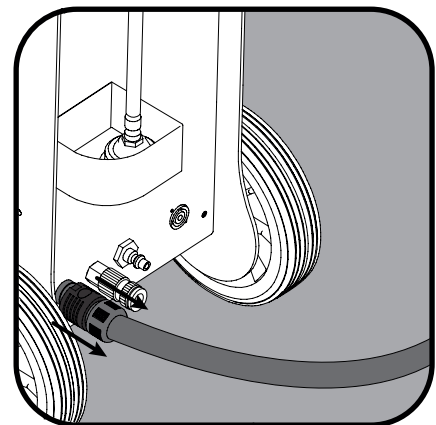
After closing the shut-off valve on the mains water supply outlet and switching off the compressed air generator, operate the lance or the liquids system on your TEGRAS brushing equipment so that no water, air or chemical remain in the conduits. This image shows the low pressure lance being operated.



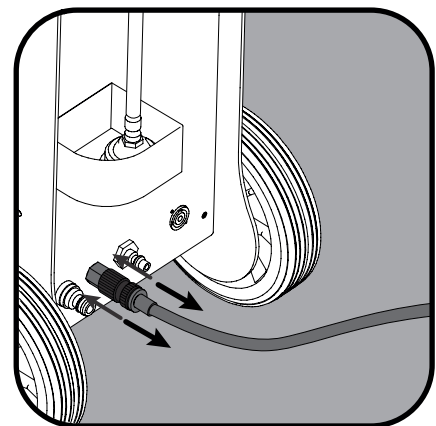
After performing this step, place the selector button in STOP mode.



Remove the water inlet connection from your IFOAM MINI in the way shown in the image.



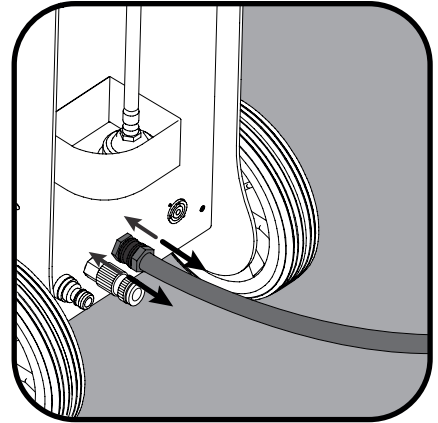
Remove the liquid outlet connection from your IFOAM MINI in the way shown in the image.



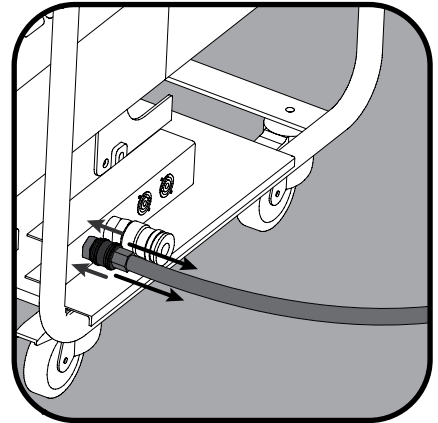


## operating instructions

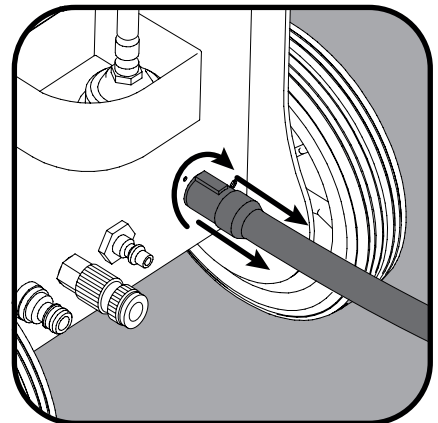
Remove the compressed air inlet connection from your IFOAM MINI in the way shown in the image.



Remove the compressed air inlet connection from your IFOAM MINI in the way shown in the image.



Remove the mains electricity connection from your IFOAM MINI by turning the connector to the left and pulling it out as shown in the image.



It is preferable to remove the Bag-in-Box when the machine is not going to be used.



# use of chemical products

COMEGRAS BOX is the chemical used for operating the IFOAM MINI. It is a degreaser especially designated for cleaning, sanitising and deodorising dirty areas that are especially greasy and areas with burnt remains in facilities and materials in the food industry such as the meat and dairy industries, abatoirs, restaurants, etc.

It is especially for use in filters, hoods, smoke extraction system ducts, floors, walls as well as any surface with intense or persistent dirt.

Its format in a 10kg bag-in-box makes it easy to carry and handle safely and cleanly. It fits inside your IFOAM equipment perfectly and it is very simple to replace.



Before starting to clean, it is very important to read the label on the bag-in-box of the product in order to know the properties, uses, instructions and warnings to bear in mind when using COMEGRAS BOX.



Using PPE to prevent splashes or inhalation of the fumes emitted by the chemical.



It is mandatory to use PPE when working with the machine as set out in Law 31/1995 for Occupational Risk Prevention.

## PPE that has to be used when handling your IFOAM:



complete facial protection

This protects against particles and splashes. The standard that governs this PPE is UNE EN 166:2002 "Personal eye-protection - Specifications".



complete body protection

It protects the body from accidental chemical splashes. The standard that governs this PPE is UNE EN 13034:2005.



complete protection of hands

It protects hands from accidental chemical splashes and against mechanical risks such as burns. The standards that govern this PPE is UNE EN 420:2004 and UNE EN 374-1:2004.



complete breathing protection

It protects against the inhalation of fumes produced by the chemical. The standard that governs this PPE is UNE EN 136:1998.

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 transport

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The machine has been designed to be able to transport it in a small van.

When transporting the machine it should be firmly fixed in order to prevent any type of damage. Additionally, it should be placed in its normal working position (vertical).

Placing the machine on a transport pallet or anything similar is advised against. It is essential that the machine is rested on a completely flat and horizontal surface.



The machine should never be placed in a horizontal position for transporting it. This would cause significant damage to the machine and consequently it would not function correctly.





## maintenance and care

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Keep the machine as clean as possible. Keep the equipment somewhere that is protected from weather effects and at a temperature between 0 and 40 °C.



After having finished using your IFOAM equipment it is important to clean the equipment's liquid circuit by performing the rinse. Storing the equipment with the chemical in the machine's internal conduits can reduce the working life of the components.

In the event of the foam or the rinse water not being projected equally from the nozzles, check that they are not obstructed by dirt.

Maintain the machine in good condition and avoid knocking or overloading it.

Keep the connectors clean so as to avoid blockages in the conduits that might cause serious faults in the machine's main elements.

### Replacement parts:

TEINNOVA has replacements for all parts of the machine as well as for consumables for all the maintenance tasks mentioned in this manual.

In the event of needing any part or consumable, get in touch with TEINNOVA's Customer Service Department on telephone number: +34 941 44 50 56.





## waste management

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The materials used in the packaging are recyclable. Do not dispose of the packaging in household waste, but hand it in at official collection points for recycling.







Do not dispose of electrical equipment in the trash!  
We recommend that electrical tools and accessories are subjected to an environmentally friendly recovery process. Please dispose of the materials in the appropriate container or go to your local collection point.

Directive 2012/19/EU of 4 July 2012 on waste electrical and electronic equipment (WEEE).



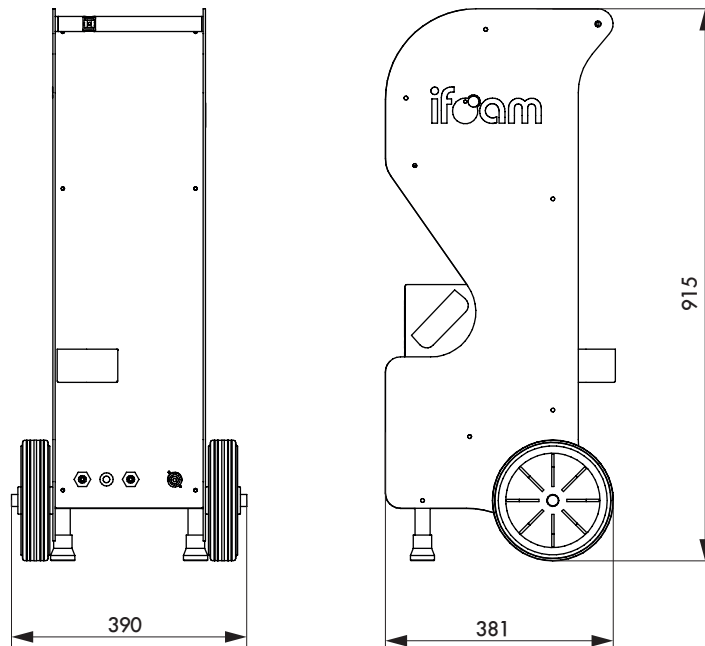
# problem solving guide

 problema	 possible cause	 solution	 look up
No foam is produced or the quality is not good enough	The passageway for liquids is closed in the lance handle	Squeeze the lance's trigger	Page 18
	Hoses badly connected	Connect the hoses correctly	Page 18 y 20
	Foam production mode does not activate	Place the selector button on the foam production function	Page 9 y 20
	Low levels of the chemical product	Check that the chemical level in the Bag-in-Box is correct.	-
	There is no mains water flow	Make sure that there is mains water input at 2 bar or greater	Page 14
	Insufficient minimum pressure from mains input	Make sure that there is mains water input at 2 bar or greater	Page 14
	Incorrect dosage of the chemical	Contact the technical service at Tecai Innova S.L.	Page 25
	The internal pump does not work	Contact the technical service at Tecai Innova S.L.	Page 25
The machine does not switch on	The equipment does not receive power	Check the mains voltage	Page 14
	Malfunctioning of the electrical components in your equipment	Contact the technical service at Tecai Innova S.L.	Page 25
The fusebox short circuits	The electrical shunt	Contact the technical service at Tecai Innova S.L.	Page 25



## technical specifications

IFOAM MINI	Features	
	220V / 50Hz	110V / 50 - 60Hz
Hydraulic power supply:	Minimum pressure 2 bar Minimum pressure 29 psi	
Compressed air supply:	Minimum 80l/min 5bar Minimum 2,83cfm 72,52psi	
Pump power:	120W	
Maximum outlet pressure:	6,9 bar / 100 psi	
Control:	Three-position switch	
Connectors:	Rapid connectors	
Dimensions:	390x381x915 mm 15x15x36 inches	
Unloaded weight:	20 kg / 44 lb	
Structure material:	Stainless Steel	





## conditions of the guarantee

**1.** "TEINNOVA" guarantees its products for a period of 15 days as regards aesthetic defects or faults which are noticeable with the naked eye. In terms of all other manufacturing defects and faults in the products, the guarantee is of 1 year.

The "Buyer" must notify "TEINNOVA" of the existence of any defects as soon as they are observed and in any case within a maximum deadline of 5 days from when they become apparent. Notification thereof outside of said deadline shall lead to the non-application of the guarantee.

"TEINNOVA" reserves the right to request that the products be sent to the factory or the closest official Technical Support Service for their due inspection and the delivery costs are payable by the "Buyer". Said costs shall be reimbursed if the product is proven to be effectively non-conforming.

"TEINNOVA" will pick up and send the products to the factory or to the nearest official Technical Assistance Service for proper inspection. At that time, it will be determined whether the warranty will apply or it is within the warranty exclusions. If the guarantee is applicable, the transport, both collection at the customer's facilities and return of the product, will be borne by TEINNOVA. If it is excluded from guarantee (point 2), the transport, both collection at the customer's facilities and return of the product, will be borne by the customer.

"TEINNOVA" reserves the right to overrule the application of the guarantee when there is no evidence of the

product's non-conformity and it shall not apply said guarantee until coverage has been expressly proven.

In the case that the product is covered, "TEINNOVA" can replace it or determine the necessary repair method.

All repair works that are carried out under the product guarantee must be carried out in "TEINNOVA" facilities or in those of the party it designates.

The guarantee covers the materials and labour required to repair or replace the parts or elements considered as defective from origin. The maximum guaranteed amount or value shall be the maximum price of the sale of the product to the "Buyer".

Any claims made under the coverage of the guarantee shall not grant the right to delay and/or withhold payment of the corresponding invoice and/or any other pending invoices.

**2.** Guarantee Exclusions: the following are excluded from the guarantee: actions, alterations or manipulations of the product that are carried out without the prior express authorisation of the "Seller"; indirect and/or consequential damage; damage caused by negligence, by improper use or by usage that does not conform to the instructions and intentional damage; faults due to adaptations made to the products or the use of parts that were not previously and expressly certified or authorised by the Seller; costs for detection of the fault; costs for collection or replacement (the latter two are unless the non-conformity is proven and within the limits established in section 1).

TECAI INNOVA S.L.  
C/ Las Balsas 16-B, Pol. Ind. Cantabria.  
26009 LOGROÑO (La Rioja), Spain.



TEINNOVA reserves the right to make changes to the equipment without giving prior notice.



# declaration of agreement "CE"

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## TEiNOVA

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MODEL: **IFOAM MINI**

SERIAL NUMBER: TG33203310000 - TG33203319999

### MANUFACTURER INFORMATION:

Manufacturer name: TECAI INNOVA S.L.

Telephone number: +34 941 44 50 56

Fax: +34 941 25 24 71

Web: [www.teinnova.net](http://www.teinnova.net)

TECAI INNOVA, SL, under its sole responsibility, certifies that the machine model described above complies with all the essential requirements of the following directives:

- Machinery directive 2006/42/CE
- Directive 2014/30/EU on electromagnetic compatibility, as amended.
- Directive 2014/35/EU on the marketing of electrical equipment.

### TECHNICAL DOSSIER MANAGER:

Technical Director

ARMANDO SÁENZ ANGULO

Pol. Ind. Cantabria, C/Las Balsas 16

26009 Logroño (La Rioja)

SIGNATURE: ARMANDO SÁENZ ANGULO  
Technical Director

Done at Logroño, 28 November 2018

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