

Clemas & Co Ltd

Industrial Cleaning Equipment
Sales - Hire - Service

IPC SG 48 STEAM CLEANER WITH VACUUM OPERATOR MANUAL



Clemas & Co. Unit 16 Ashchurch Business Centre, Alexandra Way,
Tewkesbury, Gloucestershire, GL20 8NB.

Tel: 01684 850777

Fax: 01684 850707

Email: info@clemas.co.uk

Web: www.clemas.co.uk



Mod. SG-48

S 8010 M

OPERATING INSTRUCTION MANUAL

Attention: in order to use this machine, it is advisable to have read and understood the content of this manual.

INTRODUCTION



This manual is an integral part of the appliance and it contains all the necessary information for its operation and maintenance. The user must read it carefully before starting the appliance.

ORIGINAL INSTRUCTION

The text was scrupulously revised, however, any eventual printing mistake should be indicated to the manufacturer. Moreover, in order to improve the product we reserve the right to modify and update this publication without notice. Any reproduction of this manual, even partial, is forbidden without the authorization of the manufacturer.

INTENDED USE

Professional steam generator:

This appliance is to be used in the inside. The functions provided for this appliance are exclusively the cleaning of floor and washable surfaces compatible with steam, textiles included; (not to be used on electrified parts). Any other use other than that, it is to be considered unauthorized and dangerous.

IDENTIFICATION AND TECHNICAL DATA

On the label attached on the back of the machine, you can find the technical specification shown in the chart below:

Model:	SG-48 S 8010 M		
Electric power supply (V – Hz)	230 - 50	240 - 50	220 - 60
Max power	3,5KW	3,7KW	3,4kw
Steam pressure	800 kPa (8 bar)		
Steam production	80÷95 g/min.		
Boiler capacity	3.2l		
Heating time	6 min.		
Acceptable pressure	1000 kPa (10 bar)		
Boiler max power	3400 W	3600 W	3300 W
Boiler material	inox Aisi 304		
Weight	32 kg		
Dimensions LxPxH	745x480x1040		
Tolerated water conductivity	80÷1500uS/cm (4÷75 °f)		
Water tank	5 l		
Detergent tank	5 l		
Vacuum bucket	13 l		
Vacuum motor By-pass 2 st.	max. 175 m³/h		
Appliance of class	I		
Sound pressure	76 dB(A)		
Socket for vacuum	Max 1400W(with internal fuse 8A T)		

SAFETY DEVICES OF THE PRODUCT:

Two thermostats: one ceramic thermostat to restore manually frontal to the boiler, one bulb thermostat inserted in the tube between the resistances, it begins to work in the event of excessive temperature or anomaly.

Safety valve, it allows the discharge of the steam in excess in case of anomalous condition of the machine under pressure. If it starts working, turn the machine off and take it to a maintenance center for a checkup.

Low voltage in the handle (safety voltage used for connection to the inside of the hose).

USED SYMBOLS

	GENERAL DANGER: when used, this symbol indicates the need to carefully pay attention to the functions or notes described
	MAINTENANCE: operations and maintenance details
	STEAM : attention hot steam jets
	HOT SURFACES: attention burns
	DECOMMISSIONING: rules to be followed at the end of the product life
	DO NOT DIRECT THE JET towards persons, animals, electrical equipment under pressure or the machine itself

SAFEGUARDS RULES

- The Electric power connection must be made by a qualified electrician and must conform to IEC 60364-1. It is recommended that the electric supply to this machine should include a residual current device that interrupts the power supply if the leakage current to ground exceeds 30 mA for 30 seconds or a device that checks the grounding circuit.
- WARNING Children or unqualified persons should not use the machines.
- The device can be use by persons with reduced physical, sensory or mental capabilities, or lack of experience or knowledge as long as they are under surveillance or after having received instructions regarding the safe use of the appliance and after the comprehension of its dangers.
- Children must not play with the appliance.
- The appliance must be disconnected from the plug after use and before the user performs maintenance on the unit.
- The cleaning and maintenance meant to be performed by the user should not be made by children without supervision.
- The liquid or steam must not be directed towards the devices which contain electrical components, such as the interior of ovens.
- Do not use in swimming pools when they are full of water.
- Do not leave the device unattended when it is connected to the power.
- Do not use the device if it has been dropped, if there are visible signs of damage or if there are losses.
- Maintain the machine out of reach of children when it is used or it is cooling down.



- If the power cord is damaged, it must be replaced by the manufacturer, its service agent or a similarly qualified person in order to avoid any hazard.
- Do not use the machine if the power cord or important parts of the machine are damaged, for example, the safety devices, tubes under pressure, the gun trigger.
- If you are using an extension cord, the plug and socket must be watertight.
- Inadequate extension cords can be dangerous.
- Do not spray or jet-wash the equipment.
- Jets can be dangerous if used improperly. The jet must not be directed at persons, electrical equipment under pressure or the machine itself.
- **WARNING** Risk of explosion. Do not spray flammable liquids.
- **WARNING** Hoses, fittings and connections are important for the safety the machine. Use only hoses, accessories and couplings recommended by the manufacturer.
- **WARNING** To ensure the safety of the machine, use only original spare parts supplied by the manufacturer or approved by him.
- **WARNING** The machine must be disconnected from the power supply by disconnecting the plug from the outlet during cleaning, maintenance and when replacing parts or as it converts the machine to another function.
- The appliance must be always placed flat on the floor during normal use, so as to prevent it from falling.
- **WARNING** The boiler of this machine is designed to be used with water as described in the instructions, the use of other cleaning agents or other chemicals may jeopardize the safety of the machine.
- The steam generator must not be used in presence of corrosive or potentially explosive atmospheres (gas, vapors o inflammable mists and/or combustible dust). If the safety valve starts working and steams gets out of the machine, turn the machine off and take it to a maintenance center for a checkup.
- Do not immerse the appliance in water for cleaning.

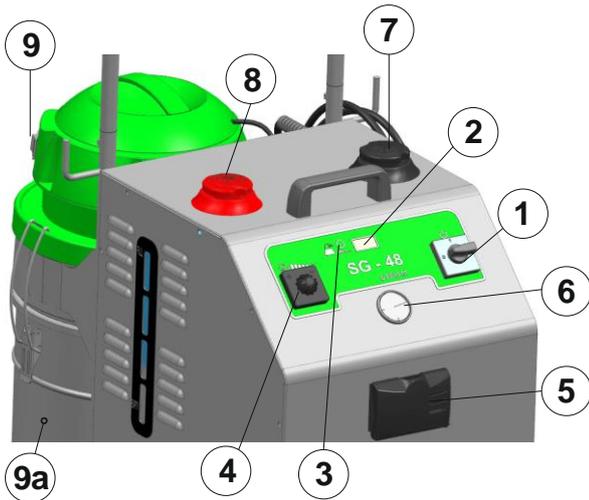
WARNING DURING USE

During use, the following minimum instructions should always be followed:

- It is advisable to wear gloves as protective devices to avoid burns during use
 - Be careful not to touch nozzles, they become hot during the steam output.
 - Pay attention to the contact with the external surfaces of the machine during use, they can overheat.
 - The steam generator is equipped with a security cap, its purpose is to regulate the pressure in the tank if too high.
 - In case of foam or liquid leakage from the bottom, turn off right away!
 - The appliance must be disconnected from the power before performing any maintenance.
 - Never use the appliance without shoes.
 - Do not use the device or touch the plug with wet hands.
 - Do not use the machine if there are people in its range, unless they are wearing protective clothing.
 - Do not direct the jet towards yourself or other people to clean clothes or footwear.
 - Do not open the filling orifice during use.
 - Do not spray or jet-wash equipment.
 - Do not use the appliance outdoors in case of rain, or exposed to high temperatures under the sun.
 - Do not cover the machine with cloth or similar things during its use or until it remains hot, give it time to cool down.
 - Before any maintenance is carried out, wait for the machine to cool down.
 - The power cord must always be completely unrolled before using the machine.
 - **WARNING:** disconnect the machine from the power source by unplugging it when leaving the machine unattended.
- ▶ Do not tow with vapor pipe or cable, it could get damaged!
- ▶ An inadequate extension of the cable can also be dangerous



CONTROL PANEL



- 1 General switch
- 2 Display
- 3 Detergent switch
- 4 Steam adjustment knob
- 5 Connector block for hose
- 6 Pressure gauge
- 7 Water tank cap
- 8 Detergent tank cap
- 9 Vacuum switch
- 9a Dirtwater bucket



PREPARATION and START TO USE

Open the cap (7) and fill the tank with tap water.

-Note: If the water available should be "very hard" (>20°F), It is recommended the use of 50% demineralized water or distilled water, (this to avoid excessive limestone formations and to be sufficiently conductive)

ATTENTION: Do not add detergents, anti-limestone solutions or essential oils in the water tank boiler (7), these can cause irreparable damage to the boiler and circuits.

-Fill the detergent tank (8) with a no-foam detergent.

-Hook the dirtwater bucket (9a)

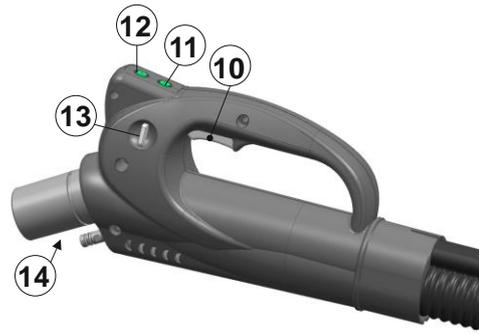
-Connect the plug to a socket on an electrical interconnection conformed to the rules of the country, equipped with a switch and an earth terminal efficient.

START TO USE:

Turn the main switch on (1). The pump will charge the boiler before starting to heat.

The display (2) will turn on and indicate for a couple of seconds the revision index of the PCB, the liter of water consumed and will proceed with the temperature-pressure status (HEAT) of the machine, when the machine is ready, it will visualize "176". (usually the machine needs around 6 minutes to be ready.)

Choose the most suitable accessory for the needed use and connected it to the multifunction handle (14), by means of the extension tubes, then insert the hose connector to the block (5), push until you hear a click.

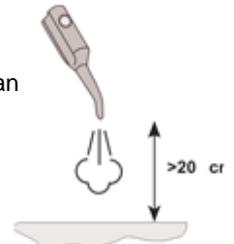


- 10 Steam delivery lever
- 11 Vacuum switch
- 12 Detergent switch
- 13 Steam lever (10) lock button
- 14 Tubes/accessories attachment

When the machine is ready, to release steam through the handle of the flexible, press the lever button (10). Now use the brush or accessory in the surfaces to be cleaned.

Attention: it is recommended to perform the first release of steam after the heating on a container for about a minute, this is to collect any condensate water generated in the initially cold ducts.

Attention: if you are working on delicate surfaces or things, keep the steam jet at an adequate distance of at least 20-40cm.



DETERGENT USE:

If you need to use detergent check and fill the tank (8), turn the function on by pushing the button (3) on the front panel (CHEM), keep it pushed to regulate the ejection level by seeing it changing on the display. Now push button (12) on the handle in order to start releasing detergent on the surface to be cleaned. To stop it, push again button (3) (C.Off).

VACUUM USE:

Before vacuuming, take the bucket (9a) off and check that the filter is in place. Control if the switch (9) it turned on. Now press button (11) and you can vacuum dirt and liquid (in the display you will see "MAH" showing the activation of max. vacuum). When the bucket (9a) is full with dirty water, the vacuum noise changes and then stops; stop the machine immediately and empty the bucket. When vacuuming operations are done, it is advise to clean the filter and dry the bucket or let it open so that it can dry itself.

STEAM RELEASE REGULATION:

Through the regulation knob (4) placed frontally on the machine, you can gradually adjust the release of the steam.

END OF WATER: The acoustic and the visual indicator of the display (2), indicates when there is no more water inside the tank by showing "-H2O", this is why the machine will stop the steam release.

WATER SUPPLY:

Proceed as described:

Open the cap (7) and refill the tank with water (check the water level on the side label).

Close the cap.

You will hear the pump starting to work, please wait a few seconds and then re-start your cleaning operation with steam.

ACCESSORIES AND USE:

FLEXIBLE HOSE AND HANDLE



To connect the accessories, release steam and detergent and to vacuum surfaces, it is necessary to use the flexible hose.

The product is designed to ensure maximum practicality.

EXTENSION TUBES



The extension tubes have to be connected to the flexible hose. They can be used in pairs or individually.

WINDOW SQUEEGEE



This accessory can be applied directly to the flexible. It is ideal for cleaning glass, tiles, windows and other flat surfaces. With the lower rubber brush you can clean and with the top you can remove the film of water.

WARNING! When cleaning cold glass (in winter), apply the steam from a distance of at least 50 cm.

STEAM&VACUUM TRANSPARENT NOZZLE



Nozzle to be connected directly to the flexible hose or to the extension tubes. It can be used only with steam or with steam, detergent and vacuum. Suitable for both hard and soft surfaces (like sofas, carpets, etc.)

RECTANGULAR BRUSH



This accessory must be connected to the hose or the extension tube.

This brush is ideal for large surfaces and floors. It is equipped with a frame for carpets and a frame for liquid suction.

The brush has on the top of two pliers for cloth, it can be used with or without cloth.



The cloth offers a great power of absorption and cleaning, and it is designed to mitigate the power of steam released during the treatment of very delicate surfaces such as wood - Laminate - Parquet - treated Cotto.

SUCTION NOZZLE



This accessory has to be applied directly to the flexible. Suitable for cleaning with vacuum on glass or other surfaces not reachable with the window squeegee.

STEAM LANCE



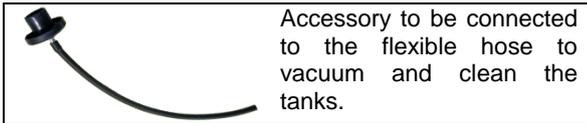
This accessory can be applied directly to the flexible. Suitable for having a powerful jet of steam conveyed the nozzle exit. For a perfect result it can be used together with the suction nozzle, so that you can dry the cleaned surface with vacuum. Pay attention when cleaning delicate surfaces, start the steam release maintaining a minimum distance of 20-40cm and then bring it closer depending on the desired result and the treated surface.

CURVED SUCTION NOZZLE



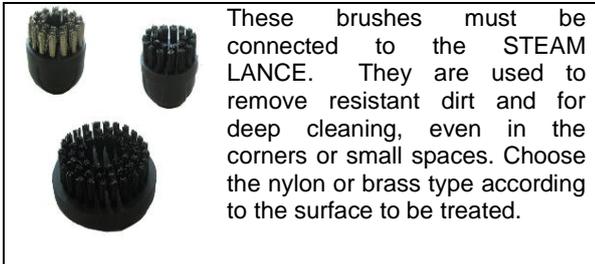
This accessory has to be connected to the flexible hose. It is used to vacuum small or difficult to reach surfaces.

TANK-SUCTION ACCESSORY



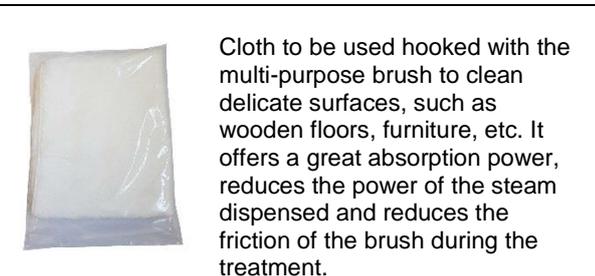
Accessory to be connected to the flexible hose to vacuum and clean the tanks.

BRUSHES



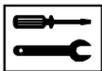
These brushes must be connected to the STEAM LANCE. They are used to remove resistant dirt and for deep cleaning, even in the corners or small spaces. Choose the nylon or brass type according to the surface to be treated.

MICROFIBER CLOTH



Cloth to be used hooked with the multi-purpose brush to clean delicate surfaces, such as wooden floors, furniture, etc. It offers a great absorption power, reduces the power of the steam dispensed and reduces the friction of the brush during the treatment.

MANTAINANCE (End user)



* Always remove the plug before cleaning or carrying out operations on the machine. * End user must not open or dismantle the machine.

For the safety of the operator and to always ensure a perfect performance, we recommend the following checks and maintenance:

AFTER EVERY USE:

For a correct cleaning, it is advice to clean the machine and its accessories with a clean cloth moistened only with a few drops of water. Do not use alcohol or other solvents, they may damage the plastics and components.

To maintain efficient and easy to couple the accessories, check the o-ring seal (*steam sealing gaskets*) and possibly wet them with a little silicone grease.

VACUUM FUNCTION: when you finish to vacuum, it is advisable to vacuum some water to clean the conducts and the filter. Afterwards, dry the bucket or do not totally close it so that it will dry itself.

PERIODICALLY:

Periodically check that the power cord does not show signs of wear or aging. If it is damaged, it is absolutely necessary to get it replaced by specialized personnel before being able to re-use the appliance again.

BOILER CLEANING (End user)

Once a year a check and boiler cleaning must be carried out in our authorized centers.

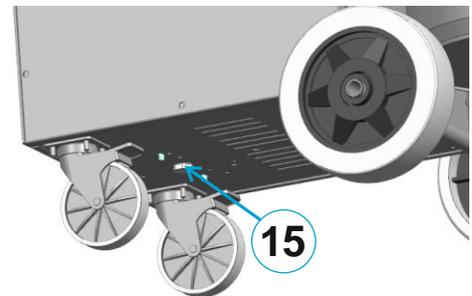
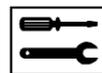
RINSE: It's recommended at least every 50 hours of operation or 2 months.

a) **DISCHARGE:** The machine must be cold or definitely discharged from the steam pressure and the plug disconnected. With the help of a wrench CH 21 unscrew the cap (15) placed under the machine in correspondence of the boiler (see image). After having taken off the cap, shake slightly the machine to let the water and the dissolved limestone out.

When the boiler is empty, clean and close carefully the cap tightening it with the wrench.

b) **FILLING:** Fill the water tank (7), turn the machine on and make it start again, waiting for the boiler to be re-charged again.

(att: it may be that during the first charge cycle, the "end of water" light turns on and you need to shut down/restart the machine to complete the load)



BOILER AND TANK CLEANING:

The boiler cleaning is recommended at least every 200 hours of operation or 6 months.

1- Cleaning with suction of the plastic tank (7): Check that the water level in the plastic water tank (7) is at least halfway up, shake/move the machine to shake the water and any possible deposit.

Connect the flexible hose to the connector block (5) of the machine, and hook the "TANK SUCTION" accessory into the handle, insert the accessory tube into the tank (7) and completely suck the water in it. (*Operation also possible in the tank (8)*)

2- The machine must be cold or definitely discharged from the steam pressure and the plug disconnected.

Exhaust the contents of the boiler, carefully following what described in the previous point "BOILER DISCHARGE".

Prepare 2 liters of water and vinegar, in proportions of about 60% vinegar 40% water.

Insert the prepared liquid in the refill tank of the machine (7).

3- Turn on the machine and wait for the pump to finish filling the boiler. (Att: it may be that during the first charge cycle, the "end of water" light turns on and you need to shut down/restart the machine to complete the load). When fully charged, the machine will start the heating cycle (**Heat**): do not wait for the heating but immediately turn off the main switch turn off the main switch, unplug the power plug and let the machine to rest for 6-7 hours.

(Att: do not let inside the solution over the indicated time period).

4- With the machine cold and the plug disconnected, shake it well and then open the cap under the boiler

(15), now empty well all the limestone dissolved in the solution.

Now clean and close the drain plug carefully.

5- Fill the charging tank (7) with clean water. Turn the machine on and wait for the boiler to be charged again and following the instruction written in "Start to use". Wait for the charging and the heating.

Now, for about 10 minutes the steam supply will smell of lemon given by the washing performed.



► * after the cleaning operations of the boiler, it is advisable to check if the caps under the machine leak, in this case check their closure with a wrench or (with the machine discharge and cold) replace the seal with an original spare part.

PROBLEMS AND SOLUTIONS

<p>FAULT Steam leaks from the accessories</p> <p>SOLUTION (End user) due to wear or damage of o-rings. Replace them taking care not to damage them and insert them with attention. Lubricate them with grease (no mineral).</p>
<p>FAULT Steam tube plug is difficult to insert into the outlet of the machine</p> <p>SOLUTION (End user) Do not force to insert it, but put a bit of silicone lubricant on the o-rings and into the joint connection .</p>
<p>FAULT The boiler needs much time to warm up.</p> <p>SOLUTION (End user) Clean the boiler as described. In case, make the absorption with the power rating indicated in the technical data check.</p>
<p>FAULT Pressure drops quickly while using the steam</p> <p>SOLUTION (End user) Clean the boiler as described. In case, make qualified personnel check the correct working pressure and the integrity of the resistance.</p>
<p>FAULT Intervention of the circuit breaker during use. (Probable dispersion from the resistance or electric valve to ground)</p> <p>SOLUTION (Qualified personnel) Check that the power cord is not visibly damaged (if so, substitute it). Try connecting the plug into a different socket. Verify that there are no spills or leakage of water from the machine that are deposited in the electrical parts.</p>

FAULT
Steam gets out of the exhaust valve in the bottom of the machine.

SOLUTION (Qualified personnel)
Check the correct working pressure of the boiler, check the functioning of the level probe and in case replace the safety valve with an original spare part, of identical characteristics.

FAULT
Vacuum does not work (engine does not start). (probable intervention with interruption of the fuse to protect the socket, for excess absorption or failure of the motor)

SOLUTION (Qualified personnel)
After checking the lack of power in the intake of the vacuum with the vacuum control active, remove the power plug, open the machine and replace the fuse (8A 250V Timed). Before connecting it again, check that the motor is not shorted or has electrical problems.

DISPLAY FAULT MESSAGES:

Fault: water in the boiler	H 2 o	lack of level in the boiler over x 60 seconds
Fault: serial communication	- n l n	no communication between display - basic board
Fault: heating	E r C	the pressure is not reached in 15 minutes
Fault: boiler charging	E H 2 o	control time of first charge, over 100 seconds.

DECOMMISSIONING:

DISPOSAL AND RECYCLING

Do not discard the components of the appliance into the environment. For more information on proper disposal of the household appliances, holders may contact the public service responsible or resellers.



The symbol of the crossed bin on the appliance or its packaging indicates that at the end of its life the product must be collected separately from other waste. This product complies with the EU

Directive 2011/65/UE - 2014/68/UE (PED) . Within the meaning of the EU Directive 2012/19/EU in the field of electric and electronic equipment, do not dispose of the appliance with the normal household waste but hand it over to a center of differentiated collection journal. The user must take the appliance to an appropriate center for electronic goods and electro-technical ones or return it to the seller when purchasing of a new equivalent device, on a one-for-one basis. An appropriate recycle, treatment and compatible environmental disposal of the device help to avoid possible negative effects on the environment and on the health and facilitates the recycling of the materials of which the device is composed. Abusive disposal of the product by the user implicates sanctions in accordance with the current law. For more information regarding the recycling methods, please contact the competent local authorities.

DICHIARAZIONE DI CONFORMITÀ "CE"

Dichiaro sotto la nostra esclusiva responsabilità che il prodotto al quale questa dichiarazione si riferisce è conforme alle seguenti Direttive Comunitarie:

"CE" CONFORMITY DECLARATION

We declare on our own responsibility that the product to which this declaration refers is in accordance with the following European Community Directives :

"CE" KONFORMITÄTSERKLÄRUNG

Auf unserer Alleinverantwortung erklären wir, daß das Produkt, auf das sich diese Erklärung bezieht entspricht den folgenden Richtlinien der Europäischen Gemeinschaft:

DECLARACIÓN "CE" DE CONFORMIDAD

Bajo nuestra exclusiva responsabilidad, declaramos que el producto, al que esta declaración se refiere, es conforme con las siguientes directivas comunitarias:

DECLARAÇÃO "CE" DE CONFORMIDADE

Declaramos sob a nossa exclusiva responsabilidade que o produto ao qual esta declaração se refere está em conformidade com as seguintes directivas comunitárias:

DECLARATION DE CONFORMITE "CE"

Nous déclarons sous notre exclusive responsabilité que le produit auquel cette déclaration se réfère est conforme aux directives européennes suivantes communautaire

2006/42/CE – 2014/30/UE - 2011/65/UE - 2014/68/UE (PED)