

- Multi place suction unit  
**SG-20**



• USER MANUAL

**Dear customer,**

Thank you for choosing a product from the Wassermann range. Wassermann Dental-Maschinen incorporates the highest standards of quality and the latest technology.

In order to enjoy maximum performance and years of trouble-free operation, please read this user manual carefully before you connect this device and start work, and operate the device according to the recommended guidelines. The operation safety and the functionality of this device can only be guaranteed if you follow both the general safety guidelines and the applying laws to prevent accidents as well as the precautions given in this user manual. We are not liable for any damages which occur due to inappropriate usage or faulty operation of this device.



Make sure that anyone using this device has read and understood this user manual.

**Keep this user manual in a safe place where it can be referred to as required at any time.**

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## 1 Features

The suction unit SG-20 is used to extract dental dust at the workplace and units used in the dental labs.

- powerful suction unit for professional use in the lab
- especially designed for use with dry trimmers, milling units etc.
- direct connection of two working places
- power control is infinitely variable using the control element
- modular filter system for different uses
- innovative filter concept, easy-to-replace filter system
- other filters available: from the activated carbon filter to the high-volume plaster pre-filter
- filter saturation display

## 2 Safety guidelines

### 2.1 Safety symbols used in this manual



#### **Warning!**

This is a warning of risk situations and dangers.

Failure to observe this warning could be life-threatening. These warnings has to be observed.



#### **Information!**

This symbol draws your attention to specific features that has to be observed.

## 2.2 Safety guidelines

Configuring and operating this equipment requires **precise knowledge** and **observance** of the instructions in this **user manual**. The equipment is designed only for its intended application.



**WARNING:**

Servicing and repairs should be carried out only by authorised specialists.  
Disconnect the power plug before starting any maintenance work.



Make sure that the equipment is connected to the correct power source.



Do not operate the unit without a fan guard or a filterbag! Do not operate the SG-20 in an explosive atmosphere! Do not apply suction to any liquids.

## 2.3 Responsibility for operation or damage

The responsibility for operating the device lies exclusively with the owner or user if said device is incorrectly serviced, maintained or altered by persons not employed by an authorised dealer or if the device is used in a manner contrary to its specified purpose.

The unit has to be maintained and operated in accordance with this user manual. Wassermann Dental-Maschinen GmbH is not responsible for damage arising from the **nonobservance** of these instructions.

Warranty and responsibility provisions contained in the sales and supply conditions of Wassermann Dental-Maschinen GmbH are not extended by these instructions.

### **3 Application**

The suction unit SG-20 is versatile in use. The unit was specially developed for use with laboratory equipment (e.g. dry trimmers, milling machines or belt grinders) where high suction power is required. The standard version has connections for two suction points.

The SG-20 has a tough suction motor with carbon brushes (up to 600 operating hours) and a high-quality control unit with soft start as well as an external rotary potentiometer for controlling the fan and a control lamp to show when the filter is saturated.

Additionally, the unit's modular structure permits operation with activated carbon.

Accessories such as a dust pre-cleaner (Zyklon) or pneumatic shut-off valves complete the system.

Only use the device for this type of application.

### **4 Before starting**

#### **4.1 Transport**

Before transporting the unit, ensure that it has been unplugged from the power socket. Make sure that it is packed correctly in order to avoid accidental damage.



Be sure to check for any transport damage when unpacking the goods. Note down any damage if found.

## 4.2 Installation

Open the box, remove the packing materials, and carefully lift out the device and accessories. Check the included accessories.

The device has to stand horizontally on a steady and even surface.



Install the device in a place where it will not block the working area and the functionality (take the dimensions into account). Make sure that there are about 10 cm of free space on each side to guarantee air circulation (heat dissipation).



Do not install the unit outdoors or in places without proper ventilation.

Before start-up, be sure the device reaches room temperature.

## 4.3 Storage

If the unit is to be stored for an extended period, protect it from moisture and dust.

# 5 Installation / Start-up

1. Remove supply line/control element from the filter below the lid.
2. Make an electric connection.
3. Insert the power plug into the socket, making sure that the mains and the unit operate on the same voltage.

## 6 Operation

### 6.1 General operating instructions

All instructions for using the unit, whether in verbal or written form, are based on our own experience and experimentation and can only be regarded as guidelines.

1. The unit can be switched on and off by pressing the rocker switch on the supply line.
2. Start the fan and set the desired level by turning the control element. It can also be used to briefly stop the fan.
3. Use the rocker switch to deactivate the SG-20 during longer interruptions in work.



You have to press the rocker switch on the supply line in order to deactivate the unit!

The control element can be used to stop the fan, but the unit itself is not switched off!



## 7 Troubleshooting

Fault	Cause	Remedy
Filter saturation – red lamp glows	Full filter	Replacing the filter (see 8.2.1)
Motor control does not work	Damaged potentiometer of the speed control	Please contact our service department
Full filter – but red lamp does not glow	Damaged lamp	Please contact our service department
	Damaged differential pressure switch	
Empty filter – but red lamp already glows	Damaged differential pressure switch	Please contact our service department



If the above recommendations do not solve the problem, contact your dental depot or our service department.

## 8 Care and maintenance

### 8.1 Cleaning



Disconnect the power plug before starting any maintenance work.

The identification plate has always to be kept in easily legible condition and has not to be removed.



Remove external dirt from time to time with some form of cold cleaner.

Use only cold cleaners to avoid damaging the paintwork or removing the lettering.

The equipment should be cleaned at regular intervals to ensure trouble-free operation. It requires only normal cleaning (sponge, damp cloth, mild detergent) and no further chemical additives.

### 8.2 Maintenance

#### 8.2.1 Replacing the filter

Replacing the filter is part of the maintenance work.

Please replace the filter in the event that the suction performance falls noticeably, and certainly when the pilot lamp lights up.



Regular filter replacement is necessary to ensure maximum dust extraction. The pilot lamp for filter saturation was set to maximum suction performance. It simply indicates that the filter should be replaced; it does not deactivate the fan.

A disposable micro fine dust filterbag is fitted; it must be replaced when dust saturation (red pilot lamp) is reached.

To do this, open the upper fasteners on the right and the left, remove the lid, take out the filterbag and wrap in the adhesive foil enclosed with the spare filter.

Insert the new filter, close the lid.

The SG-20 comes with an additional fine dust filter cassette, Class M, as standard.

It is necessary to change the motor protection filter from time to time to protect the cooling air to the motor from becoming contaminated.

### **8.2.2 Changing the motor protection filter** ***(Hard side of the filter faces the fan)***

The motor protection filter is to be found at the front in the grip recess, and should be changed when needed (degree of clogging).





If the filter is too heavily clogged, the volume of cooling air is reduced which shortens the motor's life.

### **8.2.3 Changing the secondary cassette / installing the activated carbon filter**

1. Do not forget to disconnect the power supply before changing the filter.
2. Remove the lid by opening the top locks on the left and right, and remove the filter bag.
3. Fold the safety bar (down) by removing the Phillips screws. Open the lower locks which are now accessible, and take out the filter housing.
4. Take out the holder with the cassette filter and press out the used filters. (Check position and condition of O-ring seal)
5. Push new filter into the holder in the direction of the arrow (shown on the filter cassette).
6. Insert cassette filter holder into motor module, mount filter housing and close the bottom locks.
7. Fold safety bar back into position and tighten screws!
8. Insert filter bag, put the lid on and close top locks.



-  When fitting, or. replacing the activated carbon filter, please initially press the 'filter cassette dust class M' (white folded filter) into the slot for activated carbon filter operation in the direction indicated by the arrow (displayed on the filter cassette). The activated carbon filter cassette (black cassette) is then fitted.
-  Depending on their use, activated carbon filters should be replaced when necessary, but after no later than 4 to 6 months. The filter cassette dust class M (secondary filter) should be replaced depending on its use (recommendation: use for no more than 6 months).

### 8.3 Repairs



Servicing or repairs to the unit has only to be carried out by qualified technicians. Only original spare parts are to be used. Responsibility for the product is voided if unauthorised persons alter it or if inappropriate components are installed.

## 8.4 Spare parts

If necessary please contact our service hotline phone.

## 8.5 Service hotline

**0049 (0)40 / 730 926 - 0**

## 8.6 Scope of delivery / Accessories

Included parts:	Item no.
Supply line with switchable shock proof plug	140022
Micro fine dust filterbag (yellow) tall, dust class M	610074
Filter cassette, cpl.	140435
Speed regulator, fitted	140440
Motor protection filter (1 x inserted, 1 x enclosed)	2 x 610019

Accessories:	Item no.
Spare micro fine dust filterbag (yellow) tall, dust class M	610074
Spare filterbag for plaster (white) tall, class 1 / class 2	610073
Spare activated carbon filter, cpl.	140551
Spare filter cassette, cpl.	140435
Spare motor protection filter	610019

## 8.7 Warranty



The warranty period for our equipment is 12 months. If faults occur within the warranty period, contact your dental depot or get in touch directly with our service department.

Your equipment should only be operated in perfect condition. If faults occur which could harm operators or third parties, the unit should not be used until it has been fixed.

This warranty does not cover damage caused by improper use, external mechanical causes, transport damage or interference with the unit by unauthorized persons.

## 9 Technical data

<u>SG-20</u>	<u>Item-No. 140989</u>
Voltage*	220–240 V / 50/60 Hz
Power consumption	7.8 A
Output	1480 W
W x H x D	290 x 796 x 282 (without plug) mm
Weight	17.0 kg depends on version
Sound level	≤ 74 dB (A)
Suction capacity	180 m <sup>3</sup> /h (free-blowing)
Extractor nozzle	2 x Ø 50 mm interior

*\*Other voltages on request*



The emission value may be higher > 70 dB (A), depending on the fan output utilisation.

Please take suitable protective measures (e.g. ear protectors).



The technical data are subject to change without prior notice.

## 10 EC Conformity Certificate

in accordance with 2006/95/EG (low-voltage guidelines) and 2004/108/EG (EMV guidelines) and 2006/42/EG (machinery guidelines)

Manufacturer:	W A S S E R M A N N Dental-Maschinen GmbH Rudorffweg 15 - 17 D-21031 Hamburg	Product description:	Suction unit for dental applications
Model:	SG-20 standard version	Item no.	140989
Applicable standards:	DIN EN 61010-1 DIN EN 61000-6-3 DIN EN 61000-6-1 DIN 45635-1 DIN EN 60335-1		

Hiermit wird bestätigt, dass die oben bezeichnete Maschine den genannten EG-Richtlinien entspricht. Diese Erklärung wird ungültig, falls die Maschine ohne unsere Zustimmung verändert wird.

This is to confirm that the above mentioned machine complies with the described EC rules. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur de la Communauté Européenne. Cet avis est nul et non avenant si cette machine est modifiée sans notre accord.

Esta máquina, anteriormente mencionada, cumple con los límites requeridos por el reglamento EC. Ahora bien, esta declaración quedará invalidada en caso de realizar modificaciones al aparato sin nuestra aprobación.

Hiermee wordt bevestigd dat bovengenoemde machine voldoet aan de voorgeschreven EU normen. Deze verklaring verliest geldigheid als er zonder onze uitdrukkelijke toestemming wijzigen aan de machine worden aangebracht.

Place, date: Hamburg, 12.08.14

Company stamp:



Signature : \_\_\_\_\_  
Wilfried Wassermann  
(Managing Director)



**WASSERMANN**  
DENTAL-MASCHINEN GMBH  
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**WASSERMANN**  
DENTAL-MASCHINEN

● Die Basis für Ihr Labor

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