

• **Vacuum mixers**
Wamix-Classic / Wamix-Injector (V.-IV)



Wamix-Classic (V.-IV)



Wamix-Injector (V.-IV)

• **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 instruction 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 instruction 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 instruction manual.

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

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1 Features

Wamix is a manufacturer of vacuum mixers used not only for mixing all kinds of plasters, embedding media and silicones, but also designed for specialised dental procedures and for vacuum-rinsing of prostheses.

When mixing silicones, make sure that the beaker is **only filled to the max. height for silicone**. Otherwise, silicone could penetrate the interior of the unit itself.

Units have separate drives for vacuum generation and for the mixing mechanism. The mixer in the **Wamix-Classic** and **-Injector** versions can be switched on and off at any time by pressing a button, without interruption of vacuum.

Until changed, the current preset mixing time (up to 999 sec.) becomes the default for subsequent use. An audible signal (approx. 5 sec.) indicates the end of the mixing process, time display flashes.

The vacuum is guaranteed because the beaker on the **Wamix-Classic** and **-Injector** is held to the flange by the vacuum. Mixers are supplied as wall units, but can be converted for tabletop use at any time. (For accessories, see 8.5)

- compact vacuum stirrers with powerful, maintenance-free motors
- perfect mixing of all kinds of plaster, embedding materials and silicone
- press-button start; automatic mixing when beaker is applied
- audible signal at programme end, time display flashes
- mixing time adjustable up to 999 seconds
- Speed: 200-600 rpm
- beaker vented only after ON/OFF switch is activated
- separate motor and pump drive, the mixing mechanism can be switched on and off at any time without interruption of vacuum
- low-maintenance
- simple cleaning thanks to stay-clean surfaces
- 350 ml beaker and wall bracket supplied, table stand and other beaker sizes available as extras

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.



This equipment is designed to operate at 220-240V / 50/60 Hz.

Make sure it is always connected to the appropriate power supply.

Always remove the plug from the power socket before undertaking maintenance or cleaning work.

A locking hook underneath each unit prevents it coming loose once it has been mounted in the bracket.

Allow the condensers to discharge before opening the unit.

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

Wamix equipment is used for mixing all kinds of plasters, embedding media and silicones under vacuum.

The vacuum can be as high as approx. 900 - 950 mbar.

This unit is also suitable for vacuum rinsing of models for special dental procedures. The insulating layer between the model and the prosthesis cannot separate prematurely because the model remains moister in the pressure-embedding unit than when water is used.

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 must stand on a steady and level surface or use the supplied bracket to mount it on the wall.

If mounting on a wall, ensure that the wall is strong enough to support the unit. For drawing a **drilling scheme** to drill the dowel holes please see page 8. Leave **at least 30-35 cm free space** beneath the unit.



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.

4.4 Mounting instruction fastening set for wall mounting

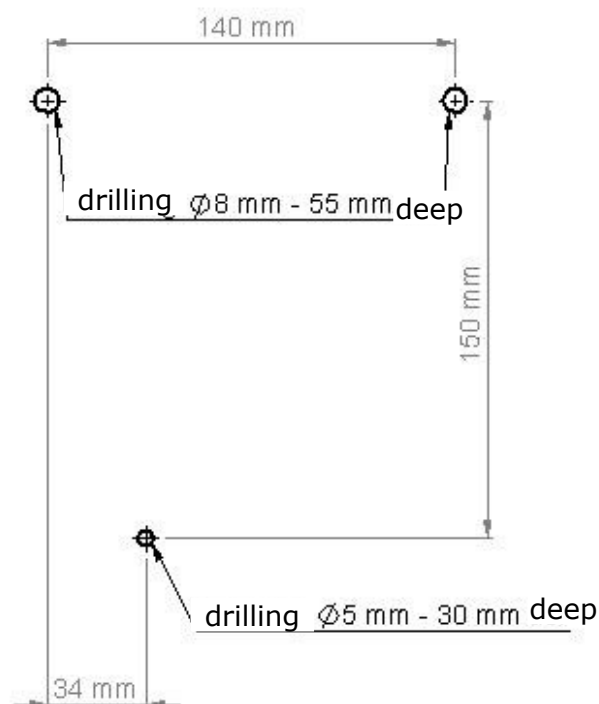
Please check the included accessories:

Incl. in delivery item.-no. 174358 fastening set	
Quantity	Name
1	Securing bracket
1	Phillips head screw M 4x8
1	Washer Ø 4,3
1	Serrated washer Ø 4,3
1	Slotted screw 4 x 16
2	Slotted screw 6 x 50
2	Screw anchor S8
1	Screw anchor S5

Mounting instruction:

Please drill the holes as indicated in the following drilling template. Please make sure before that the wall is really suitable for mounting a device (aerated concrete walls and drywall are problematic).

Drilling template



Secure the enclosed screw anchors as shown in Figure 1. Screw the 6x50 screws into the two upper holes; keep a distance of 6-7 mm to the wall! (Figure 2)

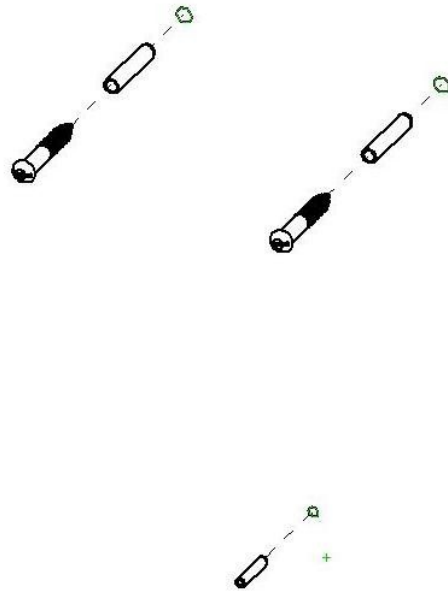


fig. 1

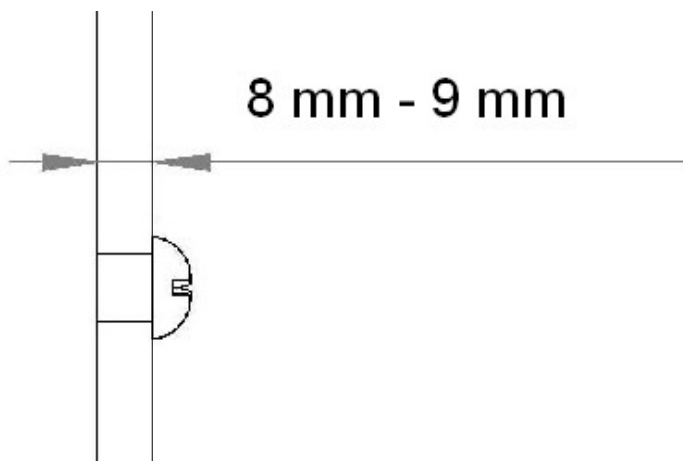
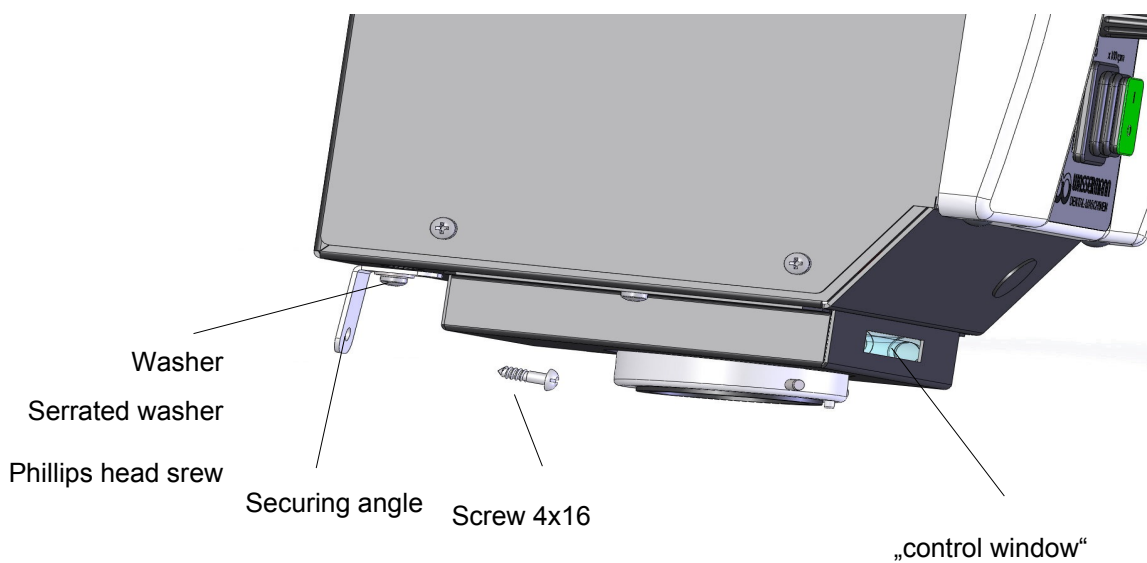


fig. 2

Screw the securing bracket to the Wamix as shown in Figure 3.


Do not yet fully tighten the Phillips head screw, however – you still need to be able to move the securing bracket.

fig.3




Carefully hook in the device. Check, whether the device hangs loosely (i.e. moving back and forth on the screws). If this is the case tighten the 6x50 screws until the device hangs securely. Finally tighten the securing bracket. First at the wall, then tighten the screw on the device itself (Figure 3).

5 Start-up / Installation

-  Check that the mains voltage and the voltage requirements of the mixer are the same, then plug in the power cable.

Only for Wamix-Injector:

Install a compressed air line in accordance with the technical data. Be sure to use the correct hose size if the line is long (inside diameter min. 6 mm). Provide a servicing unit for each line and use a pressure regulator to maintain a constant pressure.

-  **Accidental mixing is not possible because the motor cannot start until the beaker is held to the rim by the vacuum. The mixing time also needs to be set.**



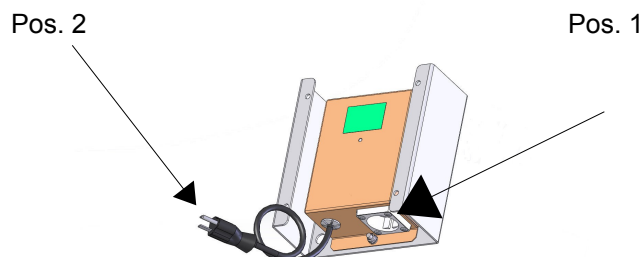
Before you start your vacuum mixer, make sure that the safety hook (under the unit) has been turned through 180° (should fit in behind the wall mount). Pull the hook forwards using the slot, then retighten the screw on the hook to prevent it coming loose.



Warning: Use only beakers with the new curved seal (171708).



When using the 115 V version you have to install the power pack Order no. 171976. Therefore you plug in the conductor of the Wamix into the socket (Pos.1) of the power pack. The conductor of the power pack (Pos.2) has to be plugged into the house socket. In order to mount the power pack at the table stand please use the enclosed screws M6.



Start-up / Installation

- Switch on green master switch (1) (vacuum mixing).

Only for Wamix-Injector:

Open compressed air valve

When the device is **used for the first time**, the vacuum first needs to be adjusted at the throttle valve (for the vacuum generator) using a screwdriver. The recommended input pressure is a minimum 5 bar. The **throttle valve (see fig. 4)** is located on the front lower right of the chassis (remove the black cover). Slowly open the valve from its zero position (to the left = +, to the right = -), until the needle is in the green zone. **The best vacuum will not be obtained if the valve is fully open - a middle setting is best.** This should be adjusted later if the pressure changes.



Remove the black cover – the spindle of the throttle valve for the vacuum is located behind it.

fig. 4







Wamix-Injector: If the needle does not reach the big end of the green zone on the pressure gauge during the setting, there is too little flow to the unit. Check the compressed-air supply.



If the equipment will not be used for an extended period, switch off the compressed-air supply and the vacuum mixer.

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.
-  Fill the beaker to the *Max marking*. The vacuum will draw any excess material into the system.
-  The beaker will come away automatically once the vacuum is removed. To avoid damaging the seal, *never* remove the beaker by force.
-  The sealing surfaces between the beaker and the plate has to be clean - likewise the rotor fastenings and the beaker lid - to ensure trouble-free operation.

6.2 VACUUM MIXING with the Wamix


By default, the timer is set to 60 seconds.

6.2.1 Wamix-Classic

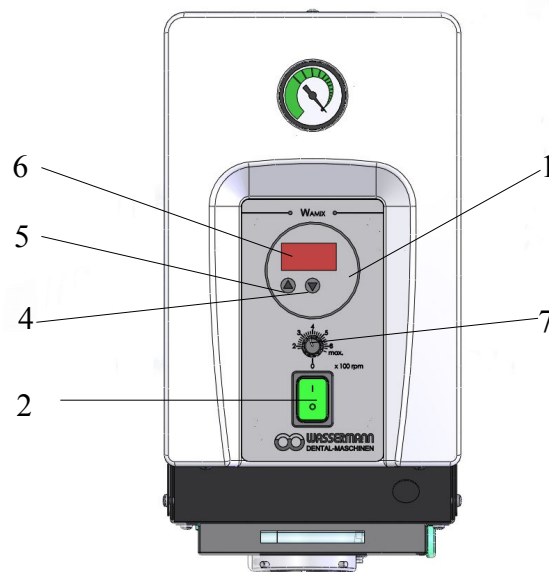


fig. 5

1. Set the mixing time on the **timer (1)** (up to 999 sec.) using the buttons (4 and 5).
 - A: Automatic mixing** = turning knob (7) you can make a free choice of 200 rpm until 600 rpm. – mixing time is stored until a new time is set.
 - B: For manual mixing** = set the turning knob (7) to “0”, and switch the mixer on once vacuum is created, turning knob (7) to the position which you need.

Please note: The timer (total time) starts counting down as soon as sufficient vacuum is achieved (beaker securely attached to the device). As this therefore corresponds to the mixing time, the mixer can be switched on and off any number of times (e.g. for pre- and post-vacuum). The beginning and end of the mixing time can be read on the timer display (6).
2. Place the mixing materials in the beaker and mix by hand until the powder is **well mixed** with the liquid.
3. Seal the beaker with a lid.

4. Insert the beaker in the unit from below; the vacuum will be released automatically.
Hold the beaker until the vacuum builds.
5. The mixer switches on automatically (depending on the settings – see point 1) for the set period of time. **At the end of this period, an alert signal sounds for 5 seconds, after which the timer display (6) flashes until the main switch (2) is switched off.**
6. Take hold of the beaker before you switch off the **master switch (1)** (vacuum).
After the vacuum in the beaker drops, the beaker will no longer be clamped to the unit.

6.2.2 Wamix-Injector



fig. 6

1. Set the mixing time on the **timer (1)** (up to 999 sec.) using the buttons (4 and 5).
A: Automatic mixing = set switch (3) to "1" – mixing time is stored until a new time is set.
B: For manual mixing = set the switch (3) to "0", and switch the mixer on once vacuum is created (set switch (3) to "1").
Please note: The timer (total time) starts counting down as soon as sufficient vacuum is achieved (beaker securely attached to the device). As this therefore corresponds to the mixing time, the mixer can be switched on and off any number of times (e.g. for pre- and post-vacuum). The beginning and end of the mixing time can be read on the timer display (6).

2. Place the mixing materials in the beaker and mix by hand until the powder is **well mixed** with the liquid.
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4. Insert the beaker in the unit from below; the vacuum will be released automatically.
Hold the beaker until the vacuum builds.
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6. Take hold of the beaker before you switch off the **master switch (1)** (vacuum).
After the vacuum in the beaker drops, the beaker will no longer be clamped to the unit.

7 Troubleshooting

Fault	Cause	Remedy
Mixer does not start	Blown fuse */**	Replace fuse and determine cause; otherwise, call Service Center
	Set timer to "0" */**	Set mixing time
	Turning knob (7) to "0"	Adjust the rpm
	Switch (3) to "0"	Put the Switch (3) on
Vacuum too low	Filter (vacuum) blocked */**	Check filter – clean and/or change (see 8.2)
	Leaking seal on vacuum flange for mixing beaker */**	Replace seal
No vacuum	Beaker filled above <i>Max.</i> mark, i.e., mixing ingredients in system/"control window" */**	Clean system, i.e., maintenance by Service Center
	Faulty vacuum pump *	Maintenance by Service Center
	Set pressure regulator to "0" (pressure gauge).**	Check and set pressure if necessary. (see page 12)
	Flow of airpressure too low **	Check airpressure / adjust
Beaker falls out	Faulty seal	Replace seal (171708)

Wamix-Classic * / Wamix-Injector **



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.

Solvents **must not** be used to clean the front panel!

Keep the beaker clean. When not in use, fill with water to just below the mixer.



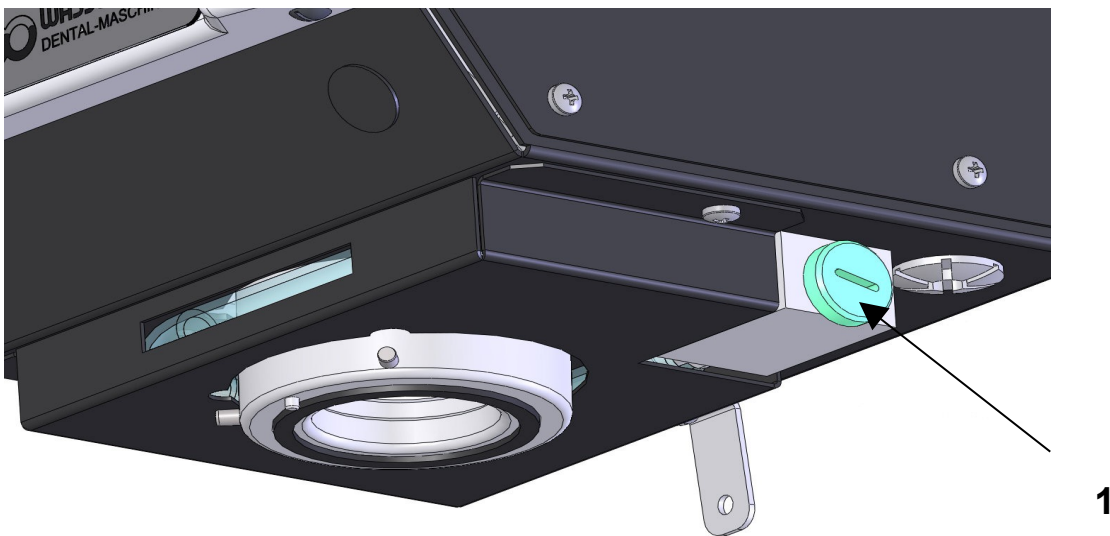
Cleaning mixing beakers in an ultrasonic bath, especially if plaster solvents are also used in the beaker, will inevitably result in changes to the structure of the beaker material and will therefore damage the mixing beaker.

8.2 Wartung

 **Allow the condensers to discharge *before* you open the mixer.**

Our vacuum mixers do not require servicing. Make sure the unit is kept clean and that the rim seal for the beaker (vacuum seal) is not damaged.

8.2.1 Changing the filter



Remove screw (1) (on the left, near the mixer mechanism on the rim under the unit). The filter swings loose at the forward end of the screw. After changing the filter, do up the screw *finger-tight* (do not forget the O-ring).

8.3 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.

8.4 Spare parts

If necessary please contact our service hotline phone:

0049 (0)40 / 730 92 6-0

8.5 Scope of delivery / Accessories

Wamix-Classic (V - IV)	Item no.: 171979
Wamix-Injector (V - IV)	Item no.: 171978*

<u>Incl. in delivery</u>	<u>Item no.:</u>
Beaker, medium cpl. 350 ml	171283
Mounting set	174358
PVC hose Ø 8 x 6 textile (blue) 2 m*	320026

<u>Accessories</u>	<u>Item no.:</u>
Table stand (W 219 x H 467 x D 308 mm)	171777
Beaker, extra small cpl. 75 ml	171295
Beaker, small cpl. 200 ml	171230
Beaker, medium cpl. 350 ml	171283
Beaker, large cpl. 600 ml	171237
Beaker, extra large cpl. 1000 ml	171269
PVC hose Ø 8x6 textile (blue) per meter*	320026
Vacuum washing beaker 600 ml	171275

8.6 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.

9 Technical data

Wamix-Classic (V - IV)	Item no.: 171979
Wamix-Injector (V - IV)	Item no.: 171978*
Voltage	220–240 V / 50/60 Hz
Power consumption	2,4 A (Si 4,0 A), 1,8 A (Si 4,0 A)*
Output	220 W, 120 W*
W x H x D	205 x 370 x 245 mm
Weight	9,5 kg, 8,3 kg*
Sound level	≤ 70 dB(A)
Speed	200-600 min ⁻¹ · 380 min ⁻¹ *
Vacuum	approx. 900 mbar, approx. 950 mbar*
Mixing time	up to 999 sec., adjustable
Safety class	IP 22
Compressed air connection*	min. 5 bar*

Other voltages upon enquiry.

The noise level of the unit amounts to ≤ 70 dB(A).



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:	Vacuum mixers for dental application
Model:	Wamix-Classic (V - IV) Wamix-Injector (V - IV)	Item no.:	171979 171978
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 Européene. 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.

Company stamp :



Place, date: Hamburg, 26.03.2013



WASSERMANN
DENTAL-MASCHINEN GMBH
Rudorffweg 15 - 17 · 21031 Hamburg

Signature : _____
Wilfried Wassermann
(Managing director)

Notes:

Notes:

Notes:

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