

Dosing and Mixing Unit **Sidomix II**



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.



The unit complies with the relevant EU guidelines.



The unit is subject to the EU guidelines 2012/19/EU (WEEE Directive).

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1 Features

Mixing and dosing of addition-vulcanizing 1:1 two-component silicones. For even dosage of both components, both must have similar viscosity. The additional quantity flow control ensures an optimum mixing ratio. Should there be discrepancies, for example, for technical reasons (wear of the pump), or following a change of components with different viscosity, the mixing ratio can be adjusted.

Advantages:

- Mixing head with separate output openings – mixing of A and B components while mounting or dismounting the mixing cannula is impossible
- Automatic production of homogeneous silicone material without any loss or bubbles at the press of a button
- Saves material and time by filling more than one bowl at the same time with just a single mixing cannula
- Forced mixing by a disposable mixing cannula, pink with bayonet mount
- Containers with quick couplings mounted directly on the device
- With quick coupling for mounting of 1 kg and 6 kg or 25 kg
 - 1 kg: adapter set available,
pad stand not required,
connection hoses not required
 - 6 kg: adapter set available,
optional small pad stand available,
(usage with pad stand: connection hoses required)
 - 25 kg: tall pad stand required,
adapter set with connection hoses required
- The included 2x2 litre material containers feature a quick coupling and can be used immediately.

2 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.

3 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.



Always keep the two silicone components separated – **never** mix up the connections! The mixing of components would cause the silicone within the device to harden, making extensive repairs of the device in the Hamburg plant necessary.

Drill a ventilation hole using a drill or similar tool at the upper side edge of the 1 litre bottle or 6 kg or 25 kg can. Do not tighten the caps of the 2 litre material containers, but just fit them loosely to ensure proper ventilation.

After hardening and before further usage, fit a new mixing cannula.

WARNING: Never use with a hardened mixing cannula!

Note that while using bulk containers, the cans must be positioned at a height higher than the device. Optional pad stands are available on request.



Leave about **2-3 cm minimal filling** inside the containers to avoid air to get into the system and the need for demanding bleeding of the device.

WARNING: It is very important to pay attention to this minimal filling!
The pump must never be used without material (never “running dry”)!

4 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.

4.1 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.

5 Application

Mixing and dosing of addition-vulcanizing 1:1 two component silicones.
For even dosage of both components, both must have similar viscosity.

Only use the device for this type of application.

6 Before Starting

6.1 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.

6.2 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.

6.3 Storage

The unit location is very important when it comes to workplace safety, even if it is only to be set up there for a short period. The room should be dry, well ventilated and vibration-free. An even temperature and wooden supports also help. The unit should not be stored or set up outdoors. If the unit is to be stored for an extended period, protect it from moisture and dust.

7 Installation/ Start-up



Before starting the unit, connect up the following:

- Remove the closing plugs from the connections and dosage head.

Finally, insert the power plug into the socket, making sure that the mains and the unit operate on the same voltage.

7.1 When using 2 Litre Material Containers (included):



Fill the material container with the relevant component.

Warning: Insert the container filled with coloured silicone compound – component B – into the colour marked entry at the back of the device. Do not mix up! If you mix up the closings even for a short time, the device must be disassembled and cleaned.

Very important: Do not tighten the caps of the material containers, but just fit them loosely to ensure proper ventilation.

7.2 When using 1 kg Bottles:



Remove the closings of the bottles filled with two component silicone and screw the above mentioned metal quick closings (accessories) onto the bottles.

Warning: Screw the colour marked quick closings onto the bottles filled with coloured silicone compound – component B. Do not mix up! If you mix up the closings even for a short time, the device must be disassembled and cleaned.

Insert the bottles with quick closings into the entry on the back of the device (the bottles will be upside down).

Very important: Drill a ventilation hole using a drill or similar tool at the upper side edge of the bottles to ensure proper ventilation.

7.3 When using 6 kg Bulks:



Remove the closings from the cans filled with two component silicone and screw the adaptor set onto the cans.

Warning: Screw the colour marked adapter onto the can filled with coloured silicone compound – component B. Do not mix up! If you mix up the closings even for a short time, the device must be disassembled and cleaned.

Insert the can with quick closings into the entry on the back of the device (the can will be upside down).

Very important: Drill a ventilation hole using a drill or similar tool at the upper side edge of the can to ensure proper ventilation.

7.4 When using 25 kg Bulks:



Note that while using bulk containers, the cans must be positioned at a height higher than the device. Optional pad stands are available on request.

Remove the closings from the cans filled with two component silicone and screw connection hoses onto the cans.

Warning: Screw the colour marked connection hose onto the can filled with coloured silicone compound – Component B - screw on. Do not mix up! If you mix up the closings even for a short time, the device must be disassembled and cleaned.

Place the can, e.g. on the optional pad stand, to make sure that it will be placed higher than the dosage device (can will be upside down) and insert the connection hoses with quick closings into the entry on the back of the device.

Very important: Drill a ventilation hole using a drill or similar tool at the upper side edge of the can to ensure proper ventilation.

7.5 Replacing Bottles/ Cans:

Remove the quick coupling/bottle adaptor from the device by pulling up the lock. Screw the quick coupling/bottle adaptor onto the new bottle/can and connect as explained above.



Take special care to never confuse the bottles or connection hoses

A+B – not even for a short time – since the silicone within the connections and pipes hardens instantly! The cleaning procedure is very demanding and may only be performed by authorised repair companies.

Note that while using bulk containers, the cans must be positioned at a height higher than the device. Optional pad stands are available on request.




Never use with a hardened mixing cannula!

8 Operation


8.1 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.


 Switch on the device; the toggle switch lights green (right side of the unit).

8.2 Note for the Quantity Flow Control/ Setting of Quantity Flow Controller

The adjusting screws are located on the side panel of the machine. (Behind the both-sided bores of the hood, please use a screwdriver.)

 Controller closed = rotary knob is turned down quite right until it stops.
100% of the component flows from the reservoir to the mixing tip

 Controller open = control range: from 2 to max. 4 turns to the left.
A part of the component flows from the container to the mixing tip and a remaining part of the component flows in the bypass circuit.

 Controller open = About 4 turns to the left. 100% of the component flows in the bypass circuit so that no material flows to the mixing tip.

8.3 Initial Start-up and Material Change

* **The unit will be delivered with a testing-liquid filled in!**



Observe at **the first start-up** * or at **material change** necessarily the following, because otherwise this will cause a mixing of the test liquid and the material or of "old" and "new" material:

(Please pay attention to **section 3** and **Section 7.1 - 7.5!**)

One-time procedure to clean up the hoses and the dosing pump:

Place an empty bowl under the mixing head without mixing tip. The quantity flow controllers are located behind the both-sided bores of the hood. Turn both quantity flow controllers 2 ½ to 3 to the left from the closed position (stop far right) to the open position by using a screwdriver.

Now press the red button and hold it down until both components run out of the openings simultaneously and without air bubbles.

Afterwards close the quantity flow controller and check the mixing ratio . If it is not 1:1 , there is the possibility to reduce the quantity flow of the component that is delivered too much. Therefore open the quantity flow controller of that component in small steps (from 2 turns to the left in 1/8-turns) in order to optimize the mixing ratio. After each adjustment, a re-inspection is necessary.

8.4 Using of the Mixing Tips and Dosage

Mount the mixing cannula by turning it 90° on the mixing cannula adaptor (clean the adaptor before if necessary). Place the bowl or the model to be used for doubling the system under the mixing cannula. Press the red button: 1:1 mixed silicone runs out of the mixing cannula.

We recommend collecting a small amount of the mixture initially output and just letting the substance output subsequently run into the form. You can fill more forms without changing the mixing cannula as long as the period between the single dosage operations lies within the dripping time of the used silicone (about 4 min.). The dosage machine 1:1 dispenses mixed silicone as long as you press the red button.

After use, leave the mixing cannula attached to the device and allow the remaining silicone to vulcanise. This closes the openings of both components sufficiently.



A new mixing cannula has to be fitted after hardening and before further usage.

WARNING: Never use with a hardened mixing cannula!

Very important:

Do not continue operation if one or both containers are empty; otherwise the pipes will convey air (observe the minimum liquid level of the containers: ~ 2-3 cm!).

9 Troubleshooting

Problem	Cause	Solution
No silicone output.	Hardened material within the old cannula.	Mount a new mixing cannula.
No silicone output.	Mixing head clogged.	Clean mixing head carefully. Warning: Silicone components must not get in contact with each other!
No silicone output.	A and B component was mixed up; silicone within the device system has hardened.	The device needs to be disassembled and cleaned by a qualified technician.
No silicone output.	Minimum liquid level of the silicone containers was reached; system has sucked in air.	Add silicone compound. Position a container under the mixing head without the mixing cannula, press the red button and hold it until both components run out even and without bubbles from the mixing cannula adaptors. Clean the mixing head and connect a new mixing cannula if necessary.
Silicone output without 1:1 ratio.	Silicone components do not have similar viscosity.	We recommend using Wassermann doubling silicones WaSil soft and WaSil speed.
Silicone output without 1:1 ratio.	Gears within the pump are not evenly worn.	With light wear, please see 8.2 notes to the setting of the quantity flow controller. Should this not suffice, the device needs to be inspected by a qualified technician.
Silicone output without 1:1 ratio.	The mixing ratio / the quantity flow controller is not adjusted correctly.	Please see 8.2 notes to the setting of the quantity flow controller



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

10 Care and Maintenance

10.1 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.



Always keep the mixing cannula adaptor and the quick closings clean.

10.2 Maintenance

The unit does not require any servicing. Just make sure that the device is kept clean.

10.3 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.

10.4 Spare parts

If necessary please contact our service hotline phone.

10.5 Service hotline 0049 (0)40 / 730 926 -20/ -24

10.6 Scope of Delivery/ Accessories

Included parts
Set material cask incl. quick fitting coupling, 2 x 2 liter
Mixing canulas, pink, 10 pcs.


Accessories	Item no.
Set material cask with quick fitting coupling, 2 x 2 liter	172640
Stand small for duplicating silicones, 2 x 6 kg-cask	172631
Stand tall for duplicating silicones, 2 x 25 kg-cask	172632
Connecting tubes cpl., 2 pcs.	172633
Adapter-set for duplicating silicones, 2 x 1 kg-cask	172634
Adapter-set for duplicating silicones, 2 x 6 kg-cask	172636
Mixing canulas, pink, 100 pcs.	622002

11 Technical Data

Sidomix II	Item no.: 172980
Sidomix II 115 V*	Item no.: on request*
Voltage	220–240 V / 50/60 Hz 110–120 V / 50/60 Hz*
Power consumption	1.6 A 3.2 A*
Output	260 W
W x H x D (max.)	275 x 340 x 440 mm
W x H x D (housing)	242 x 305 x 360 mm
Weight	11.5 kg

Other voltages on request.

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

 Technical changes reserved.

12 Disposing of the Unit

The unit has to be disposed by an authorized recycling operation. The selected company has to be informed of all possibly health-hazardous residues in the unit.

12.1 Information on Disposal for Countries within the EU



To conserve and protect the environment, prevent environmental pollution and improve the recycling of raw materials, the European Commission adopted a directive that requires the manufacturer to accept the return of electrical and electronic units for proper disposal or recycling.

Within the European Union units with this symbol should not therefore be disposed of in unsorted domestic waste.

For more information regarding proper disposal please apply at your local authority.

13 EU Declaration of Conformity

in accordance with 2014/35/EU (Low Voltage Directive) and 2014/30/EU (Electromagnetic Compatibility Directive) and 2006/42/EC (Machinery Directive) and 2011/65/EU (RoHS Directive)

Manufacturer:	W A S S E R M A N N Dental-Maschinen GmbH Rudorffweg 15-17 21031 Hamburg Germany	Product description:	Mixing and Dosing unit, 1:1, for dental applications
Model:	Sidomix II Sidomix II 115 V	Item no. 172984 Item no. on request	
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 EU-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 EU guidelines. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur d'Union 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 UE. 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, 2021-05-18

Company stamp :



Signature: _____
Sven Wassermann
(Managing Director)



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