Operating Instructions

VACURET DIGIT

LABORATORY EQUIPMENT IN STAINLESS STEEL

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Dear Customer!

The VACURET DIGIT vacuum mixer is perfectly suited for homogeneous and bubble-free mixing of plaster, polymers or resins. It is equipped with an intuitive and user-friendly digital display. Pre- and main mixing times can be programmed individually at variable speeds according to the material requirements. The VACURET DIGIT allows mixing parameters to be entered and stored in 28 programs. Variable vacuum is generated by a maintenance-free vacuum pump. Speed is independent of material quantity to be mixed. The device is available as wall-mount unit or optionally with a table top stand.

Any other use or beyond shall be deemed not to be intended. The user or operator of the device is liable for the resulting damages.

Prior to installation of the device operating instructions and especially the safety instructions must be read and followed by all personnel who use this device.

After having unpacked the device, please check carefully whether transportation damages of any kind have occurred. If that is the case, the carrier or manufacturer must be notified within 3 days. The company will **not** be responsible for any damages found after that.

These operating instructions must be read and followed by all personnel who use this device. To ensure quick access we recommend to keep it at a safe place near the device. In case of loss it can be ordered from the manufacturer.

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INDEX

1   Technical Description

1.1   Basic Equipment

- VACURET DIGIT Vacuum mixing device for wall mounting
- 1 mixing bowl 400 ml
- 1 power cord

1.2   Special Accessories

- Order-No. 23701000   Table top stand
- Order-No. 21302100   Mixing bowl 75 ml
- Order-No. 21302000   Mixing bowl 150 ml
- Order-No. 21303000   Mixing bowl 400 ml
- Order-No. 21304000   Mixing bowl 600 ml
- Order-No. 21213000   Mixing bowl 1000 ml
- Order-No. 21306000   Mixing bowl for alginates 150 ml
- Order-No. 21307000   Mixing bowl for alginates 400 ml

1.3   Operating Elements

0   Memory card slot
1   Display
2   Rotary control knob
3   Filter (bowl receptacle)
4   Power Switch
5   Device fuse
6   Mains socket
7   Bowl receptacle
8   Vacuum regulation valve
9   Mixing bowl

VACURET DIGIT Vacuum Mixer
(incl. optional table top stand)

Bottom of the device

1.4 Technical Data

Line voltage	230V/50–60 Hz
Current consumption	600 W
Height/width/depth	290/155/285 mm
Height/with/depth incl. stand	710/220/360 mm
Weight	8 kg/15 kg (incl. stand)
Speed	variable 200–600 t/min.
Vacuum	max. 98 %
Memory locations	28
Sound level	≤ 70 dB(A)
Housing	stainless steel
Made in Germany (Subject to modifications)	

2 Safety Notes

2.1 General Safety Notes

- All equipment undergoes final inspection and testing before leaving our factory. However, if equipment is damaged during shipping or through any other circumstances, it must not be used in service. Please check the device regularly for damages. Damaged parts should be replaced immediately.

- All power/air/water/gas sources should be rated for the demands of the device as listed in the technical data sheets. Maximum ratings must not be exceeded. All VDE (Verein Deutscher Elektro-Ingenieure) standards should be followed. Equipment should be grounded according to standards.

- Adherence to valid regulations regarding necessary checks (e.g. according to Accident Prevention & Insurance or electrical equipment) is exclusively taken over by the buyer/user of this product.

- This device has been designated to be used only for its intended purpose. All other applications must be prohibited for safety reasons as otherwise the manufacturer's warranty expires.

- The device should be set-up in a clean, well-ventilated room, if necessary under a hood.

- Supporting surfaces should be straight, flat and adequately stable.

- Don't place anything on top of the machine.

- To avoid injury, appropriate protection should be worn (e.g. gloves, safety glasses, safety shoes, hearing protection etc.)

- If the machine is defective or working improperly it must be taken out of service. In case of further use of the machine the owner will be held responsible for any consequential damage.

- To prevent accidents from water, fire or explosion, all power/air/water/gas sources should be turned off after working hours and during breaks, and secured against unauthorized access.

- When carrying out maintenance works or repairs or when opening the device always turn off the main power switch and unplug the whole unit.

- Repairs should be carried out only by the manufacturer or by qualified and certified personnel appointed according to chapter 7 – warranty.

- In case of leaking water out of housing or tank shut down device and call service.

- Check all hose connections for leaks, tighten hose clamps if necessary.

2.2 Specific Safety Instructions

Note:

The mixing bowl is dishwasher-proof and may be cleaned with solvent-free cleaning agents. The bowl is non-resistant to some chemicals like e.g. concentrated mineral acids, aromatic hydrocarbons and chlorinated hydrocarbons as well as ester, ether and ketone.

- Do not mix any material used for purposes other than intended or material containing solvents which are dangerous to health.
- The pump and other conducting components are not explosion-proof. The use of flammable substances is therefore prohibited.
- Do not use any high-viscosity material that may lead to a considerable decrease in mixing speed.
- If the device gets unusually hot, shut down the device immediately.
- Do not put your hands into the running driving axle and never push the paddle to the receptacle without using a bowl.
- Do not overfill the mixing bowl.
- Keep the housing clean and dry.

3   Installation

The electrical equipment is delivered fully installed. The sealed plug can be connected directly to the mains supply 230 V/16 A. For installation refer to safety notes in chapter 2.

3.1 Installation

1. Mount the device to the wall or use the table top stand (optionally available) (cf. chapter 10 wall mounting).
2. Put the connector plug into the mains socket (6) of the device.
3. Plug the power plug of the VACURET DIGIT into a socket. The device is now ready for use.
4. If the device is not used for a long period of time, disconnect it from the mains.

3.2 Key symbols

10 Program selection - according to material to be mixed

11 Add program /
own programs

12 Paging

13 Page number

14 Notes/Program display

15 Time settings

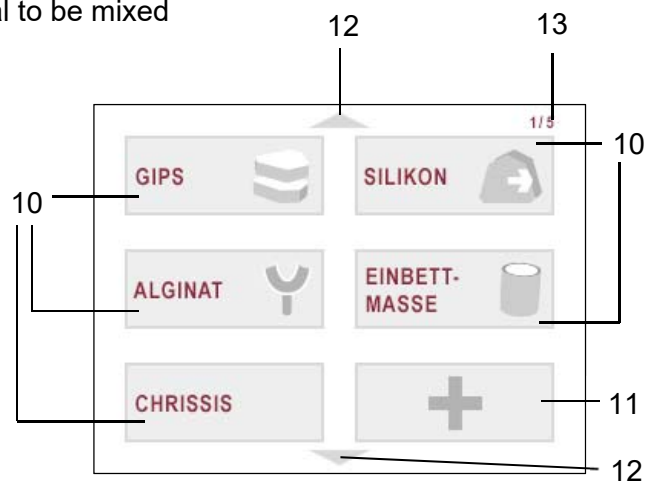16 Vacuum display

17 Speed settings

18 „Skip back"-key

19 „Play"or "Stop"-sign

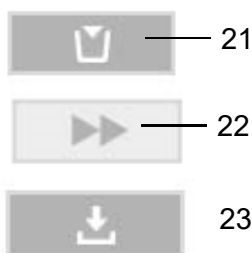20 Edit program

21 Air release (mixing bowl)

22 Right arrow key to „continue "

23 Storing

Display view (1) after turning on the device. Pre-programmed program selection

Further symbols:

21

22

23

Display (1) of a selected program (10).

4 Operation

The VACURET DIGIT is exclusively operated with the rotary control knob (2). Move the control knob (2) to select menu items and options. Push the rotary controller (2) to confirm your settings.

4.1 Operation sequence for pre-registered programs

1. Turn the power on (4).

2. Turn the rotary control knob (2) to select the required program (10) and push the rotary control knob (2) to open the program.

3. If you want to change settings, use the „edit-icon "(20) to adjust them (see chapter 4.2). Push the filled bowl (9) into the receptacle (7) to start the program automatically.

4. As soon as the program is completed, move the rotary button (2) to the air release icon (bowl symbol) (21) and push to release the bowl off the receptacle (7) . **Note: The bowl must be held tight.** Then you will automatically be redirected to the main menu.

4.2 Setting / Saving mixing parameters Editing existing programs

1. Switch the power on (4).

2. Select one of the plus signs (11) in the main menu.

3. Turn the rotary control knob (2) to „Name" and push to confirm. Here you also choose if two-stage mixing: pre- and main mixing is required or if you want to do without pre-mixing.
Note: You can also delete a program..

4. Use the letter keys to save the program under a name at your choice and confirm letter after letter by pressing the rotary control knob (2).

Use the right arrow key (22) to confirm your entry and use the right arrow key (22) once again to move on to the next position.
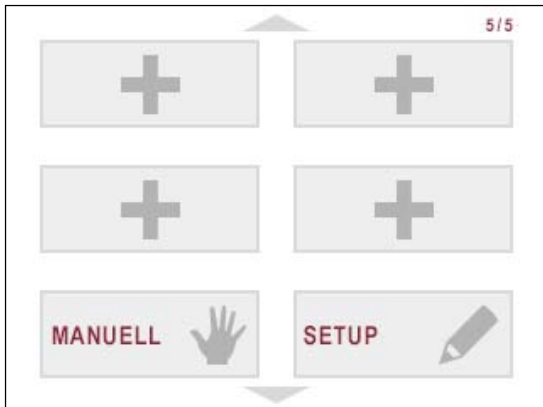

5. Enter your settings for pre-mixing and then move to main mixing (right arrow key (22)), to enter your settings.
Use the right arrow key to save your settings.
If required push the „skip back" key to skip one step back.

4.3 Operation sequence in manual mode

1. Turn the power (4) on.

2. Turn the rotary control knob (2) to the left or right until page 5 to select the manual mode. Push the rotary controller (2) to open the manual mode.

3. Enter your settings by turning the rotary control knob (2) and push to confirm.
The rotary control knob (2) is used to increase or decreas values. Push the control knob to confirm your settings. Use the „Storing" key (23), in the right lower part of the display to save your settings.

5. Push the filled mixing bowl (9) into the receptacle (7) and push the „Play"-button (19) to start th process.

6. Use the rotary control knob (2) to move and push on the air release icon (bowl symbol) in the middle of the display to release the mixing bowl (9) from the receptacle (7), as soon as the program is completed **Important: The bowl (9) must be held tight.** Then you will be redirected to the main menu.

11

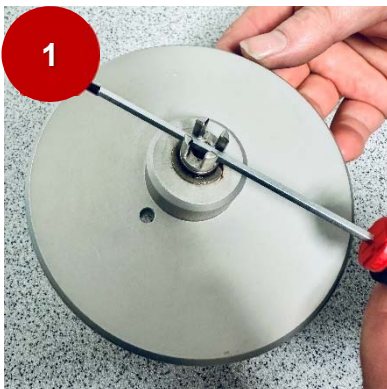## 4.4 Mixing bowl for alginates (special accessories)

In order to prevent powder residues from falling off the bowl rim into the mixed alginate, it is recommended to pre-mix water and power without a vacuum.

1. Put powder and water according to the manufacturers' instructions into the bowl and start mixing at reduced vacuum (according to instructions in chapter 4.2)
2. Mixing time depends on the material used (see manufacturers' instructions).
3. During the first 10 seconds, a reduced mixing time of approx. 400 min^{-1} should be selected, then speed should be increased to 600 min^{-1}.

4.5 Maintenance instructions for stirrer cups

To improve the smooth operation of the stirrer, you will need the stirrer cup lid, a screwdriver, and some lubricating oil.

1. Hold the stirrer lid in your hand, place a screwdriver in the connecting crown, and turn it to the right. Hold the stirring spoon firmly to loosen the screw connection.
2. Now you can remove the stirring spoon and apply lubricating oil to the opening.
3. To enhance the suction of the lid, take a small amount of oil on your fingertip and gently rub the black silicone ring on the underside of the lid. Reassemble everything and tighten the screw crown to the left.

5 Troubleshooting

Device doesn't work after turning it on. (Display does not shine after turning on or a bar will appear)	a. No power at the socket (Check main fuse of the building). b. Machine's fuse (5) has blown (Unplug the machine and replace the fuse. The fuse holder is located at the device's plug).
Bubbles in investment (low vacuum).	a. Dirty lid surface $\rightarrow$ clean it. b. Dirty gasket at the receptacle (7) $\rightarrow$ clean. c. O-ring of mixing bowl (9) untight $\rightarrow$ clean. d. Tighten vacuum regulation valve (8).
Bowl doesn't hold, although gauge indicates max. vacuum level.	a. Clogged filter (3) in der bowl receptacle (7) $\rightarrow$ replace filter. b. Clogged filter inside the device $\rightarrow$ call service. c. Do not overfill the mixing bowl (9). d. The menu SETUP (Display (1) page 5 allows to individually check each function.
Cracks in the bowl.	Note: Do not use spirit or other solvents for cleaning or mixing in the bowl. **Referring to chapter 2.2 the bowl (9) is not resistant against some chemicals.**
Program Update	For a program update (available from the manufacturer), transfer the file that you receive to the micro SD card. To do this, open the memory card slot (0) by removing the cover and use tweezers to pull the micro SD card out of the slot. After loading, insert the card back into the slot. When starting, keep the rotary control knob (2) pressed and turn on the power (4). The start process takes a while, then the flashing process is started and the program is loaded.
System error	Reset to factory settings: a. Go to the main menu on page 5/5 (last page) and select the menu „setup" by pressing the rotary control knob (2). b. Now select the menu item „reset system" and confirm your entry with „yes". You will automatically return to the main menu.

6   Maintenance

- A program update for the controller can be performed according to the notes in chapter 5.
- Check the device regularly for visible damages to housing or power cord.
- Regularly clean gasket and sealing ring of the mixing bowl (10) and receptacle (7).
- Regularly grease the mixing bowl's rim to keep it in perfect condition.
- Regularly replace the filter (3) of the bowl receptacle (7).
- Regularly clean the housing with a damp cloth.

> **Note**
>
> Clean and protect your device at regular intervals with the REITEL stainless steel care spray (order-no.: 90405000) to remove lime, plaster and dust as well as other contaminants from the surface of the equipment to prevent corrosion. The spray creates a lasting, water repellent protective film which helps to keep the equipment clean.

7   Warranty

We, REITEL Feinwerktechnik GmbH, offer a 1 year's warranty beginning from the proven date of purchase. This warranty covers all defects traceable to materials, design or workmanship. The following warranty regulations are applicable:

Within the warranty period Reitel Feinwerktechnik GmbH or an authorised distributor agrees at its sole option, to perform repair or replace this product at no charge covering all defects traceable to materials, design or workmanship. Warranty only applies to appropriate use and regular maintenance of this product according to the operating instructions. Claims under warranty are restricted to complementary performance. Additional claims, especially claims for indemnifications, are not covered by this warranty.

1.

Warranty claims have to be addressed to the distributor the product was purchased from or directly to our service department.

Contact:

REITEL Feinwerktechnik GmbH

Senfdamm 20

49152 Bad Essen

Germany

Phone: +49(0)5472-9432-32 (Service Department)

Phone: +49(0)5472-9432-0 (Reception)

Fax-No: +49(0)5472-9432-40

2.

In case of warranty claim application the sales receipt or your purchase invoice showing the date of purchase of the product and the serial number must be furnished. Securely pack and ship the device, freight charges prepaid, at your own risk to us, along with a report describing the defect. We reserve the right to decline warranty if this information has been removed or modified after purchase of the product or if they are not included in case of warranty claims.

3.

Warranty repairs have to performed by REITEL Feinwerktechnik GmbH or by authorised distributors. Repairs performed by non-authorised companies will void the claim for refund since damages to the product resulting hereof are not covered by warranty.

4.

If the unit sent in for repair or replacement is still under the original warranty then warranty is to the end of the original 1 year warranty.

5.

If the unit is destined to be operated in another country than originally intended and manufactured for, modifications to the product might be necessary to comply to special technical and /or safety standards of that specific country. Such modifications are no defects traceable to materials, design or workmanship. and are therefore expressly excluded from warranty claims.

Modification costs or damages arising from operation of the product under deviating conditions are not covered by warranty.

6.

Exclusions from warranty:

  – Service and maintenance work as well as repair and replacement of consumables according to our consumables' list
  – Transportation cost of the machine or installation and dismounting expenses incurred
  – Damages due to use of the product other than for its intended purpose
  – Damages due to faulty installation or insufficient maintenance of the product (e.g. decalcification)
  – Damages due to natural disaster e.g. lightning, water, fire, act of nature beyond control, war, inadequate line voltage, insufficient ventilation, no decalcification,

insufficient care and cleaning or non-adherence to operation and maintenance instructions according to the accompanying operation guide.

- Damage due to use of the product other than in accordance with the instructions provided by REITEL Feinwerktechnik GmH;

- The warranty does not cover the cost of removal and replacement of parts and accessories, unless supplied as original equipment by REITEL Feinwerktechnik GmH

- All kind of damages occurred not directly at the device as well as consequential damages (e.g. damages to furniture due to a lack of water, downtime of the machine, material, lost working hours, wages and other consequential damages).

This warranty shall be rendered null and void if:

- the product has been subject to any modification, repair or replacement other than as authorised by REITEL Feinwerktechnik GmbH

- the product is continued to be operated despite a functional defect

7.

The warranty is device specific and may be claimed, within the warranty period, by any person who has legally acquired the device.

8.

Consumables are excluded from warranty. Spare parts are subject to a warranty coverage of 6 months against all effects traceable to materials, design or workmanship according to these warranty regulations.

9.

Legal default claims on the part of the purchaser remain unaffected by this warranty.

10.

We reserve the right to charge a fee if repair of the device is rejected and the device is destined to be sent back unrepaired.

11.

<u>Please note:</u>

Upon repair or replacement of this unit, personal data and settings might get lost or damaged. We don't accept liability for all kind of data loss. The customer is advised to backup essential programs and data before sending for service.

12.

This warranty shall be interpreted in accordance with German law to the exclusion of UN sales law. Place of jurisdiction is our business location.

13.

If any provisions of this warranty are judged to be illegal or unenforceable, the continuation in full force and effect of the remaining provisions will not be prejudiced. The provisions of this warranty judged to be illegal or unenforceable shall be construed so as to give effect to the intent manifested by the provision by the provision held invalid, illegal or unenforceable and to give effect to section 13 hereof.

14.

Should you need to borrow a device while your device is being repaired, please contact Messrs. REITEL or your distributor. These loans are a service for which availability cannot necessarily be guaranteed. After the warranty period, a free may be charged for loan equipment as well as for shipping and packaging.
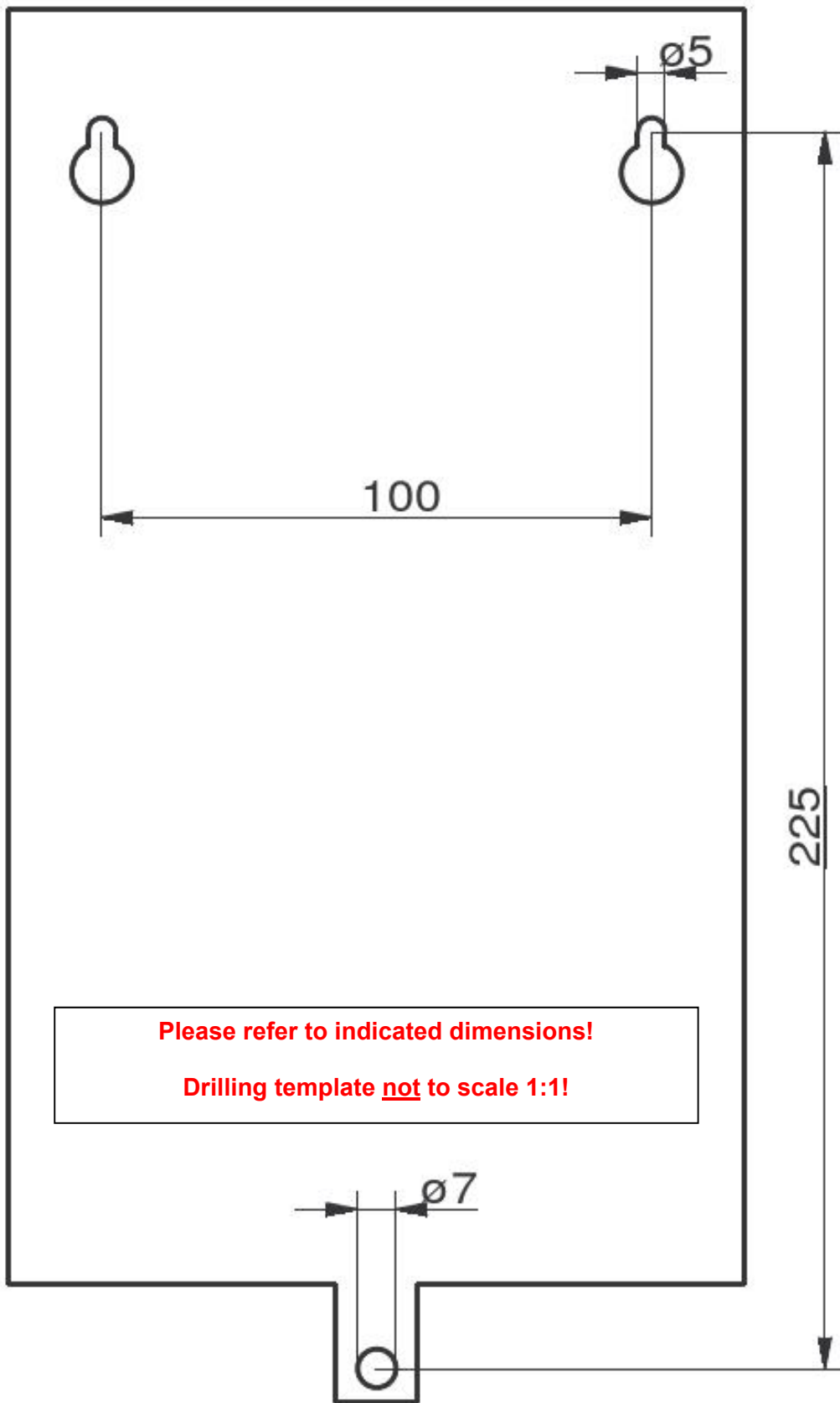
8 Disposal Regulations

According to valid laws our devices are correctly disposed of according to B2B – Regulations for proper disposal of commercial end products. Please contact your local dealer for detailed information.

9 Spare parts list

Best.Nr.	VACURET DIGIT Ersatzteilliste / Spare parts list	Stck Qty.	ME Unit
E6555610	Dichtring für 150ml Becher Sealing ring for 150ml bowl	1	Stck piece
E6555620	Dichtring für 400ml Becher Sealing ring for 400 ml bowl	1	Stck piece
E6555630	Dichtring für 600ml Becher Sealing ring for 600 ml bowl	1	Stck piece
E7011700	Dichtring für Becheraufnahme, mit Kleber E7056200 Sealing ring for bowl support, with glue E7056200	1	Stck piece
E7011200	Filter in Becheraufnahme (5Stck) Filter in bowl holder (5 pcs.)	1	Pack pack
E7049300	Sicherung 4 A träge Delay fuse 4 A	1	Stck piece
E7630450	Wandmontageset (Schrauben und Dübel) Wall mounting set (screws and anchors)	1	Set set

10 Wall mounting – Drilling template

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Please refer to indicated dimensions!

Drilling template not to scale 1:1!

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11 EU-Directive

EU-Konformitätserklärung
EC-Conformity Declaration
CE-Déclaration de Conformité

im Sinne der EG-Richtlinie 2006/42/EG über Maschinen (Anhang II A)
according to Machinery Directive 2006/42/EC (Appendix II A)
au sens de la Directive Machines 2006/42/CE (Annexes II A)

Name und Anschrift des Herstellers/Name and address of manufacturer/Nom et adresse du fabricant:

Reitel Feinwerktechnik GmbH
Senfdamm 20
49152 Bad Essen

Diese Erklärung bezieht sich nur auf die Maschine in dem Zustand, in dem sie in Verkehr gebracht wurde; vom Endnutzer nachträglich ange-brachte Teile und/oder nachträglich vorgenommene Eingriffe bleiben unberücksichtigt. Die Erklärung verliert ihre Gültigkeit, wenn das Produkt ohne Zustimmung umgebaut oder verändert wird./This declaration relates exclusively to the machinery in the state in which it was placed on the market and excludes components which are added and/or operations carried out subsequently by the final user. This declaration will become invalid if any unauthorised modification is made to the product./Cette déclaration concerne exclusivement les machines dans l'état dans lequel elles ont été mises sur le marché et exclut des composants ajoutés et/ou les opérations effectuées par la suite par l'utilisateur final. La présente déclaration perd sa validité si des modifications non-autorisées ont été apportées à la machine.

Hiermit erklären wir, dass die nachstehend beschriebene Maschine/**We hereby declare** that the machine described below/**Nous déclarons** que la machine ci-dessous

Produktbezeichnung/Product name/Nom du produit: **Vakuumrührgerät/**
                                                          Vakuum Mixing Device/
                                                          Malaxeur sous vide

Typenbezeichnung/Type/Type: VACURET DIGIT

allen einschlägigen Bestimmungen der Maschinenrichtlinie 2006/42/EG sowie der Richtlinie 2014/30/EU (EMV-Richtlinie) über elektromagneti-sche Verträglichkeit entspricht. Die Schutzziele der Richtlinie 2014/35/EU über elektrische Betriebsmittel sowie 2011/65/EU (RoHS 2) werden eingehalten./is in conformity with all applicable requirements of the Machinery Directive 2006/42/EC and the Electromagnetic Compatibility Directive 2014/30/EU. The safety objectives of the Directive on Electrical Equipment 2014/35/EU as well as the Directive 2011/65/EU (RoHS 2) are adhered to./est conforme aux dispositions applicables de la Directive Machines 2006/42/CE et de la Directive Compatibilité Electro-magnétique 2014/30/EU. Les objectifs de sécurité de la Directive sur les Matériels Electriques 2014/35/EU ainsi que de directive 2011/65/EU (RoHS 2) sont respectés.

Angewandte harmonisierte Normen/Harmonised standards applied/Normes harmonisées appliquées:

EN ISO 12100:2011	EN 61010-1:2020
DIN EN 60204-1:2019	EN 61000-6-1:2019
DIN EN 45635-1	EN 61000-6-3:2011

Bevollmächtigter für die Zusammenstellung der relevanten technischen Unterlagen/Representative authorised to compile the rele-vant technical documentation/Personne autorisée à constituer la documentation technique pertinente:

Daniel Reitel
Reitel Feinwerktechnik GmbH
Senfdamm 20
49152 Bad Essen

11.02.2021

Ort, Datum	Daniel Reitel, Geschäftsführender Gesellschafter/Managing Director/	Unterschrift/Signature/
Place, Date	Directeur Général	Signature
Lieu, Date		

We manufacture in compliance with Quality Management ISO 13485:2016, incorporating established standards.