

# PrograMill Suction Unit

## Operating Instructions





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# 1 About this Document

These Operating Instructions will familiarize you with the PrograMill Suction Unit.

This device is a suction and filtration system for the extraction of milling dusts, fumes or other particles of dental materials from the milling systems PrograMill PM3, PM5 and PM7.

The powerful and sound insulated PrograMill Suction Unit can be easily integrated within the laboratory and is quiet and low in maintenance. The cyclonic technology conserves the filter and the milled dust generated can be easily disposed of by emptying the separator.

The Operating Instructions are an integral part of the device and are valid for all named machines.

This device has been developed and produced according to the latest state-of-the-art technology. The Operating Instructions describe the safe and correct use in all operating processes.

Improper use can be dangerous. Please observe the relevant safety instructions and read the Operating Instructions carefully.

Should you lose these Operating Instructions, you can download them from [www.ivoclarvivadent.com](http://www.ivoclarvivadent.com).

Many figures and illustrations in these Operating Instructions serve only as exemplification and have no relevance in detail to the construction of the device. These are symbol pictures which may differ from the original (e.g. due to simplification).

Read all documents that apply to these Operating Instructions carefully before using PrograMill Suction Unit ("Supporting documents", page 8), in particular the chapter regarding safety and warning information.



For all types of technical questions, please contact your authorized service partner.

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### 1.1 Target groups

Target group	Duties
Operator	<ul style="list-style-type: none"> <li>• Keep these Operating Instructions available at the place where the unit is operated, also for future use.</li> <li>• Request personnel read and observe these Operating Instructions and the applicable documents, in particular the safety instructions and warnings (“Safety”, page 9).</li> <li>• Observe additional device-related stipulations and regulations.</li> </ul>
Dental technician	<ul style="list-style-type: none"> <li>• Read, observe and comply with these Operating Instructions and the applicable documents, in particular safety instructions and warnings (“Safety”, page 9).</li> </ul>
Qualified dental staff	
CNC technician	
Authorized Ivoclar Vivadent service partner	




### 1.2 Signs and symbols

#### 1.2.1 Warnings

Warnings are used in these Operating Instructions to warn you of a risk of injury to persons and/or damage to property.

1. Please always read and observe these warnings.
2. Follow all measures marked with the warning symbol and warning word.

Depending on the severity and probability of the danger, the following warning levels are distinguished:

Warning symbol	Warning word	Danger level	Consequences resulting from non-observance
	DANGER	Immediate imminent danger	Death, severe personal injury
	WARNING	Potential danger	Death, severe personal injury
	CAUTION	Potential danger	Slight personal injury
-	NOTICE	Potential danger	Damage to property

Clarification of the structure of a warning:



**WARNING WORD! Name of source of danger, cause of hazard or type of risk.**

Consequences of non-compliance with instructions.

- ▶ Action in order to avoid danger.

Hazard example:



**DANGER! Improper repairs/device maintenance.**

Risk to the patient and the user.

- ▶ Repairs on the device must only be carried out by service partners authorized by Ivoclar Vivadent using the valid version of the service manual.

### 1.2.2 Signs and symbols

Symbol	Significance
	Additional information, e. g. for better understanding, for simplifying workflows or for further information
	Prerequisite which must be followed before the subsequent actions can be performed
	Individual steps which you must perform
1., 2.	Several steps that you must perform in the given order
	The result indication of an operation step or several steps, for success control

### 1.3 Revision and validity

Version	Date	Amendments to the previous version
1.0	29-11-2017	Initial creation date

### 1.4 Supporting documents



You can obtain information about the applicable documents from your local sales partner or in the download area of Ivoclar Vivadent at: <http://www.ivoclarvivadent.com>.

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Document	Clarification
Checklist for your PrograMill system	Information about requirements that must be observed for transport, installation and use of the PrograMill system.
Operating Instructions PrograMill PM3	Instructions on operating the milling machine PrograMill PM3 and the PrograMill Tank
Operating Instructions PrograMill PM5	Instructions on operating the milling machine PrograMill PM5 and the PrograMill Tank
Operating Instructions PrograMill PM7	Instructions on operating the milling machine PrograMill PM7 and the PrograMill Tank
Operating Instructions PrograMill Base	Information on the assembly and installation of the base cabinet (optional)



## 2 Safety



### **WARNING! Improper use of the device.**

Risk to the user and third party.

- ▶ The safety chapter contains important information on the safety of the device: Please read thoroughly prior to installation and operation.



The device is built according to state-of-the-art technology and recognized safety regulations. Nevertheless, its use could constitute a risk of injury to the user or third party or possibly cause impairment to device and other property.

### 2.1 Intended use

This device has been designed for the extraction of fine dust, fumes or other dental material particles from the PrograMill milling machines:

- Zirconium oxide (IPS e.max® ZirCAD)
- IPS Empress® CAD
- PMMA materials (Telio® CAD, SR Vivodent® CAD, IvoBase® CAD)
- CoCr alloys (Colado® CAD)
- Waxes (ProArt CAD)

In the case of damage caused by improper operation or due to improper use, all liability and warranty claims are void.

Please note that only the original spare parts, filters and accessories approved by the manufacturer can ensure processing without causing excessive wear.

#### 2.1.1 Potential improper use

The device is not suitable for milling procedures outside of the dental field.

The following is considered as misuse of the system:

- The extraction of burning or smouldering materials, easily flammable or explosive gasses, aggressive materials, aluminium grinding dust
- The extraction of liquids of any kind
- Non-compliance with the specified intended use, intended operator specifications or the specified environmental conditions
- Modifications, maintenance and repairs without prior authorization from Ivoclar Vivadent
- The use of unsuitable spare parts, filters and unauthorized accessories

Improper use of the device can lead to the following:

- Danger for patients and operating personnel
- Impairment of the operability of the device

Ivoclar Vivadent assumes no liability for damages resulting from improper use.

Typical malfunctions of the device to be avoided:

Improper use	Consequences
Extraction of unauthorized substances	Danger to the user (respiratory problems, skin irritation, electric shock, etc.)
Incorrect or insufficient cleaning	<ul style="list-style-type: none"><li>• Risk of respiratory problems</li><li>• Risk of skin irritation</li><li>• Environmental damage</li><li>• Damage to the device</li></ul>
Use of incorrect spare parts, incorrect filter, incorrect accessories or operation without filter	Damage to the PrograMill Suction Unit and the milling machine
Shut-down of the device by the user during the milling operation	Milling process in the machine will stand still after the current milling job

### 2.1.2 Intended operator

The device may only be operated by qualified dental staff, dental technicians and CNC technicians who have received training for operating the device.

The user is responsible for selecting the correct device settings.

### 2.1.3 Intended environment

The device is only permitted for use in closed rooms, within the specified ambient conditions ("Ambient conditions for operation", page 53) and in compliance with the requirements for safe installation ("Choosing the location site", page 27).

## 2.2 Operator's obligations

The operator is responsible for the safe operation of the device.

- ▶ Ensure compliance and control:
  - a. Intended use
  - b. Statutory or other safety and accident prevention regulations
- ▶ Only operate the device as intended, in a technically perfect condition, in a safety-conscious and risk-conscious manner and in accordance with these Operating Instructions.
- ▶ Keep these instructions and all applicable documents complete, legible and accessible to personnel at all times.

## **2.3 Personnel qualifications**

- ▶ Ensure that the personnel assigned to work with the device have read and understood these instructions and all applicable documents, in particular safety, maintenance and repair information, before starting work.
- ▶ Ensure that personnel is aware of hazards and safety equipment.
- ▶ Manage the responsibilities, competence and monitoring of staff.
- ▶ All work must only be carried out by qualified technical staff.
- ▶ Personnel to be trained should only carry out work on the unit under the supervision of qualified technical personnel.

## **2.4 Staff obligations**

- ▶ Only operate the device as intended, in a technically perfect condition, in a safety-conscious and risk-conscious manner and in accordance with these Operating Instructions.
- ▶ Refrain from any process that could endanger staff or third parties.
- ▶ In the case of safety-related malfunctions, switch off the device immediately and allow the fault to be rectified by the person responsible.
- ▶ In all cases of doubt regarding the safety of the appliance, switch off the appliance and prevent further use.
- ▶ In addition to the overall documentation, legal or other safety and accident prevention regulations including applicable standards and guidelines of the respective operating country must be complied with.
- ▶ Do not wear jewellery such as rings, bracelets or watches when working on the device.  
Danger of crushing or cutting injuries

## **2.5 Personal protective equipment**

- ▶ If loud operating noise cannot be prevented (sound level  $\geq 80$  dBA), use hearing protectors during milling.
- ▶ When carrying out cleaning work, wear a protective mask to protect against milling dust, fumes or other particles of dental materials (half mask with protection class FFP3).
- ▶ When carrying out cleaning work, wear gloves.

## 2.6 Safety instructions for potential hazard areas

### 2.6.1 Electrical safety

If covers are opened or parts are removed which are not accessible without tools, voltage-carrying components may be exposed. The plugs may also be under voltage.

- ▶ Electrical work must only be carried out by authorized service partner.
- ▶ Before connecting the device, check that the supply voltage and frequency are correct at the point of installation (“Technical Data”, page 52 and the information on the type plate, see “Marking and labelling”, page 16).
- ▶ To avoid injury to the user and for cooling reasons and fire protection, never remove the housing covers.
- ▶ Observe the manufacturer’s installation instructions for house installation (“Supporting documents”, page 8, checklist for your PrograMill system).
- ▶ To avoid the risk of electric shock, only connect the device to a mains supply with a protective conductor, connect the grounding cable and do not touch or manipulate the connections.
- ▶ The mains plug is used as a supply circuit disconnecting means. Always connect the mains plug to an easily accessible protective contact socket.
- ▶ The device must be connected to a grounded and freely accessible mains supply socket, each in a separately protected circuit. Make sure that there are no devices connected which cause strong mains voltage fluctuations when they are switched on. These fluctuations interfere with the electronic controls and may cause failure of the system.
- ▶ Make sure that the safety socket is equipped with a residual current circuit breaker (FI).
- ▶ Protect the cable against damage due to heat, moisture, oil, sharp edges, pressure and crushing.
- ▶ In the case of damaged cables, replace only with the original spare parts.
- ▶ Before opening the filter module to replace the filter or the separator for cleaning purposes, disconnect the device from the power source and secure it against re-activation.
- ▶ If you need to disconnect the unit from the power supply at a later time: Disconnect the plug from the mains socket, not on the device.

### 2.6.2 Hazardous materials

#### Milling materials

Depending on the material of the processed discs / blocks, without appropriate safety measures during processing there is a risk of respiratory problems caused by inhaling hazardous milling dust or chips, residues or emissions.

- ▶ Only operate the suction system with the filters specified by the manufacturer.
- ▶ When extracting carcinogenic materials and/or welding fumes, from materials with a nickel or chromium content, the technical rules for the handling of hazardous substances TRGS 560 regarding air recirculation in connection with the treatment of carcinogenic hazardous materials must be complied with.

### 2.6.3 Mechanics

If you use the device carelessly when opening and closing the filter module and the separator, there is risk of crushing, danger from flying milling chips and a danger of damage to the machine.

- ▶ Only open the filter module and separator for cleaning and maintenance work described in these Operating Instructions when the device is switched off and has been disconnected from the power source.
- ▶ During cleaning and maintenance work, carefully open and close the filter module and separator.
- ▶ Only operate the device when the filter module and separator are closed. Never bypass the safety equipment of the machine or set it out of operation.
- ▶ To avoid injury to the user from inside the unit, never remove the device cover.

## 2.7 Safety instructions for individual operating phases

### 2.7.1 Transportation

- ▶ Only transport the device according to the description in these Operating Instructions ("Transportation and Assembly", page 27).
- ▶ To avoid damaging the separator in the PrograMill Suction Unit, always lift it by the handles. Do not lift the separator at the cyclone, the cyclone connections or the tubes attached to it.
- ▶ In order to avoid damaging the PrograMill Suction Unit, always hold it at the lower or middle module when lifting (turbine or filter module). Do not lift the suction unit by the lid, connections or the attached cables or tubes.
- ▶ In order to avoid corrosion on the device and subsequent damage to the device, transport and store the device only within the permissible temperature range/ambient conditions ("Ambient conditions", page 52).

### 2.7.2 Initial operation

- ▶ Ensure that this machine is only operated by trained specialists.
- ▶ If the device has been stored in a cold environment or at high humidity, maintain a drying or temperature adjustment time of approx. 4 hours (without voltage) before initial operation, at room temperature.
- ▶ Before connecting the device, check that the supply voltage and frequency are correct at the point of installation ("Technical Data", page 52 and the information on the type plate, see "Marking and labelling", page 16).
- ▶ Observe the instructions on location ("Choosing the location site", page 27) and the environmental conditions ("Ambient conditions for operation", page 53).

### 2.7.3 Operation

- ▶ Keep unauthorized persons, such as patients, children and animals, away from the unit.
- ▶ In all cases of doubt regarding the safety of the unit, switch off the appliance and prevent further use.
- ▶ Prior to connecting power or operation, check the device, the accessories and protective equipment for any damage.
- ▶ Do not use a damaged, non-functioning device or equipment or accessories, instead notify your authorized service partner.
- ▶ To ensure product safety and warranty, only use original accessories from Ivoclar Vivadent in the device. The user bears the risk when using non-approved accessories.
- ▶ Never bypass the safety equipment of the machine or set it out of operation.
- ▶ Only operate the device when the filter module and separator are closed.
- ▶ To avoid damaging the unit and reducing the power, follow the cleaning instructions and cycles ("Cleaning by the user", page 14 and "Cleaning and Maintenance Work for the User", page 44).
- ▶ Only allow the device to operate unattended if the following conditions are fulfilled for unsupervised operation.

#### **Unsupervised operation:**

The machine may be operated unsupervised, provided the national and local laws and provisions allow for such action and provided that they are observed. Furthermore, the requirements of the respective insurance company must be met.

The following conditions must be complied with in order to guarantee unattended operation.

- ▶ Never use the device if the milling area is heavily soiled.
- ▶ Protect the device against unauthorized access.
- ▶ Ensure that the room in which the device will operate is equipped with an automatic fire alarm system.

### 2.7.4 Cleaning by the user

- ▶ Only clean as specified in these Operating Instructions and observe the applicable safety regulations ("Cleaning and Maintenance Work for the User", page 44).

### 2.7.5 Improper maintenance, repairs and modifications

Improper maintenance and improper repairs or modifications will endanger patients and users and can result in damage to the unit.

Should you carry out any repairs or maintenance work or modifications to the device or remove the housing without prior written consent by the authorized services partner, all warranty claims are void.

Unauthorized opening and removal of components can expose voltage-carrying components. The plugs may also be under voltage. There is a risk of electric shock!

- ▶ Maintenance as well as repairs of damaged safety equipment or machine parts may only be carried out by an authorized Ivoclar Vivadent service partner.
- ▶ Only use the original spare parts, replacement filters and other accessories recommended by Ivoclar Vivadent.

### 3 Design and Function

The PrograMill Suction Unit is a modern extraction unit for the systems PrograMill PM 3, PM 5 and PM 7. It has been designed so that various materials can be extracted from the milling chamber. The milling procedure is controlled via an electronic system with the corresponding software.

The PrograMill Suction Unit consists of the following components:

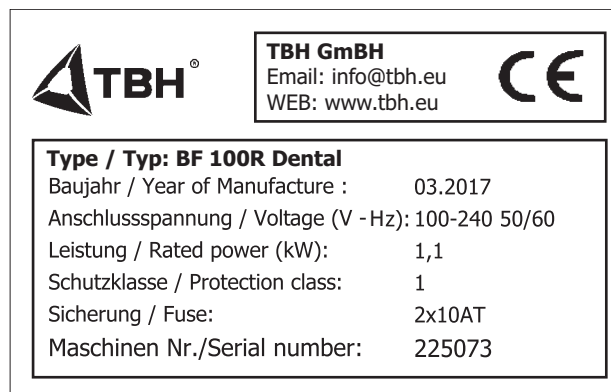
- Suction unit with display
- Separator
- Filter

The PrograMill Suction Unit is not a stand-alone system, it functions together with the milling systems PrograMill PM 3, PM 5 and PM 7. It is available as an individual product or as part of the PrograMill Base set (comprising the lower cabinet unit PrograMill Base, the PrograMill Tank and the PrograMill Suction Unit).

#### 3.1 Marking and labelling

The PrograMill Suction Unit has the product name “PrograMill Suction Unit” and the Ivoclar Digital logo printed on the front side.

The type plate can be found on the back side of the unit.

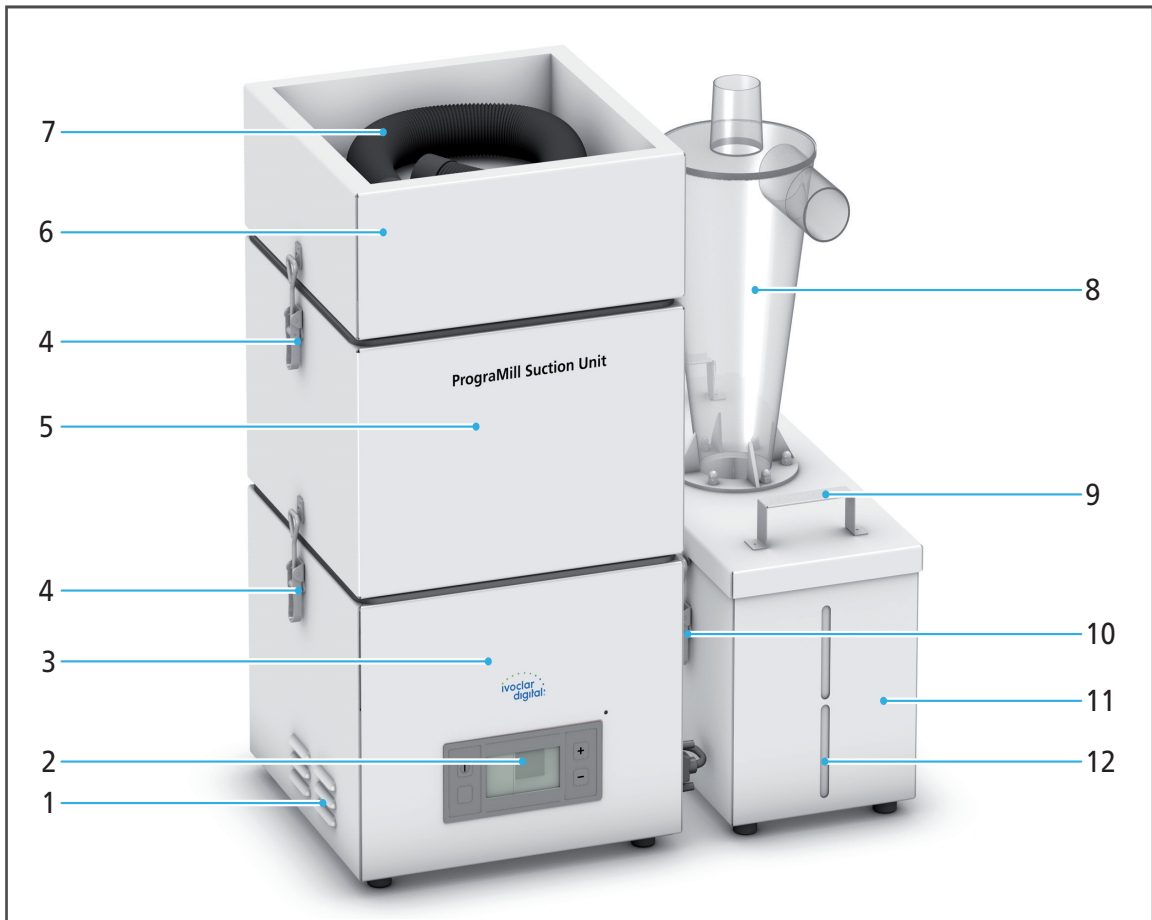


Symbols on the type plate:

Symbol	Significance
	Manufacturer
	This product meets the requirements of the CE directive.



### 3.2 Construction



No.	Description	Function
1	Ventilation slits	Ventilation of the suction unit
2	Display with keys	Manual operation of the PrograMill Suction Unit ("Display", page 24)
3	Suction unit, turbine module with display (2)	<ul style="list-style-type: none"> <li>Filtering of fine milling dust, milling fumes and other dental material particles in two filter levels</li> </ul>
4	Module fastening in the suction system (2 each on both sides)	Secure connection of the modules to the suction unit.
5	Filter module	Filtering of the exhausted air in two levels: <ul style="list-style-type: none"> <li>Above: Pre-filter</li> <li>Below: Fine / main filter</li> </ul>
6	Cover with inlet and flat storage surface	<ul style="list-style-type: none"> <li>Intake of suction air from the separator via connection at the rear</li> <li>Tube storage for manual cleaning</li> </ul>
7	Tube for manual cleaning (diameter 38mm, with crevice)	Tube for vacuuming the PrograMill Suction Unit and PrograMill milling machine during cleaning

## Design and Function

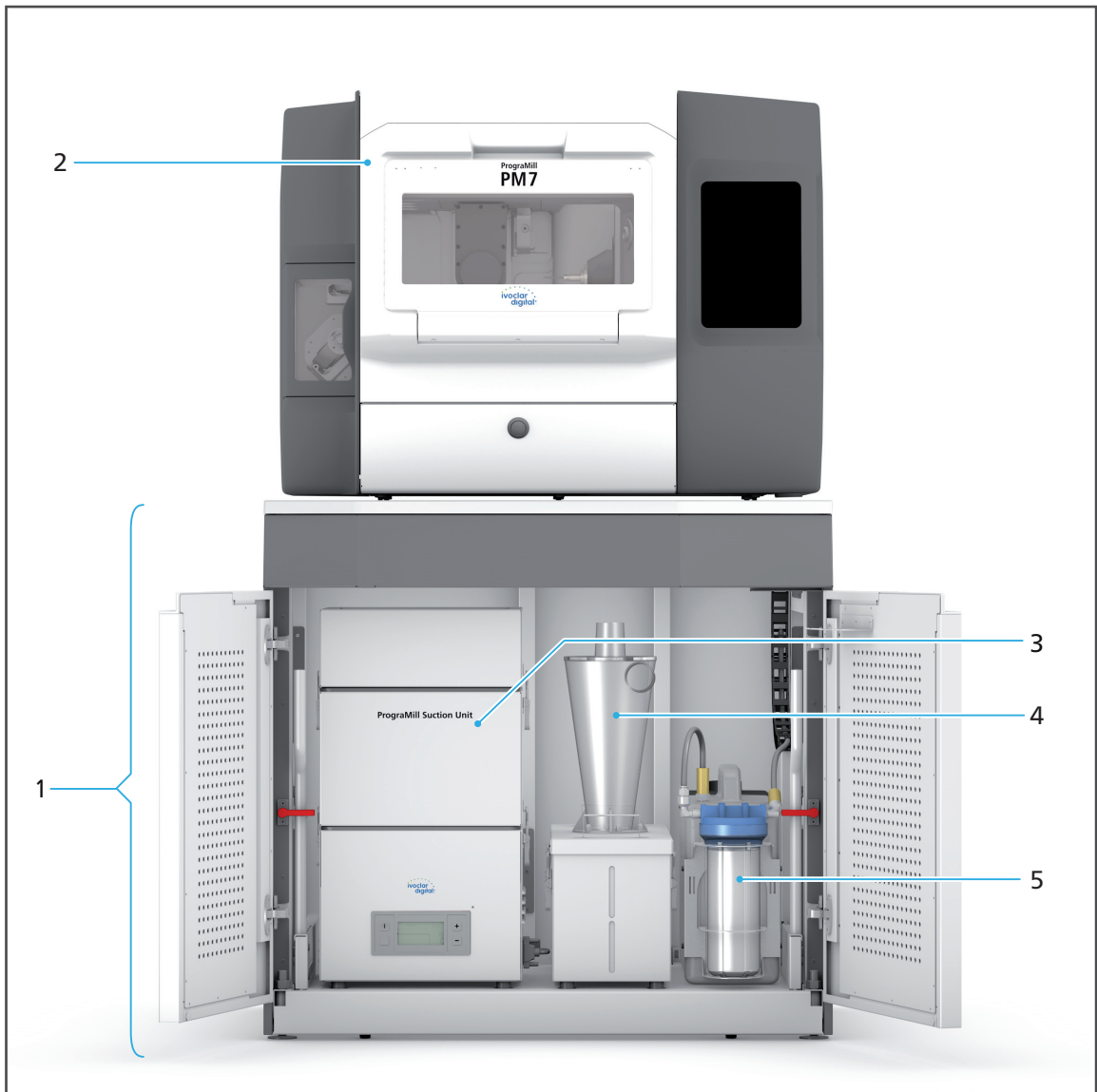
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No.	Description	Function
8	Separator cyclone	Absorption and distribution of the exhaust air from the milling machine to the separator (11) and the suction unit (3)
9	Separator handles (2x)	Handles for lifting the separator (do not hold onto the cyclone or the tubes attached to it)
10	Fastening the separator (4x)	Secure fastening of the cyclone on the separator collection container
11	Separator (collection container)	<ul style="list-style-type: none"><li>• Pre-filtering of solid particles and coarse dust &gt;10 µm</li><li>• Protection of the subsequent filter (Pre-filter, fine / main filter) in the suction unit (3) from heavy / fast pollution</li></ul>
12	Viewing window	Fill level check on the separator ("Emptying the separator", page 46)



When purchasing the PrograMill Suction Unit as a part of the PrograMill Base set, the PrograMill Suction Unit and the PrograMill Tank are both built into the same base cabinet.

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No.	Description	Function
1	PrograMill Base cabinet (optional)	<ul style="list-style-type: none"> <li>• Installation site for the milling machine</li> <li>• Storage of accessories, tools and discs / blocks</li> </ul>
2	CNC milling machine (example: PrograMill PM7)	Milling of discs / blocks
3	Extraction system of the PrograMill Suction Unit	Extraction of milling dust, milling fumes and other dental material particles in dry operation
4	PrograMill Suction Unit separator	
5	PrograMill Tank and Filter	Wet operation: <ul style="list-style-type: none"> <li>• Intake and supply of the coolant fluid into the milling chamber</li> <li>• Filter for the used coolant fluid before it is (re-)used in the milling chamber</li> </ul>

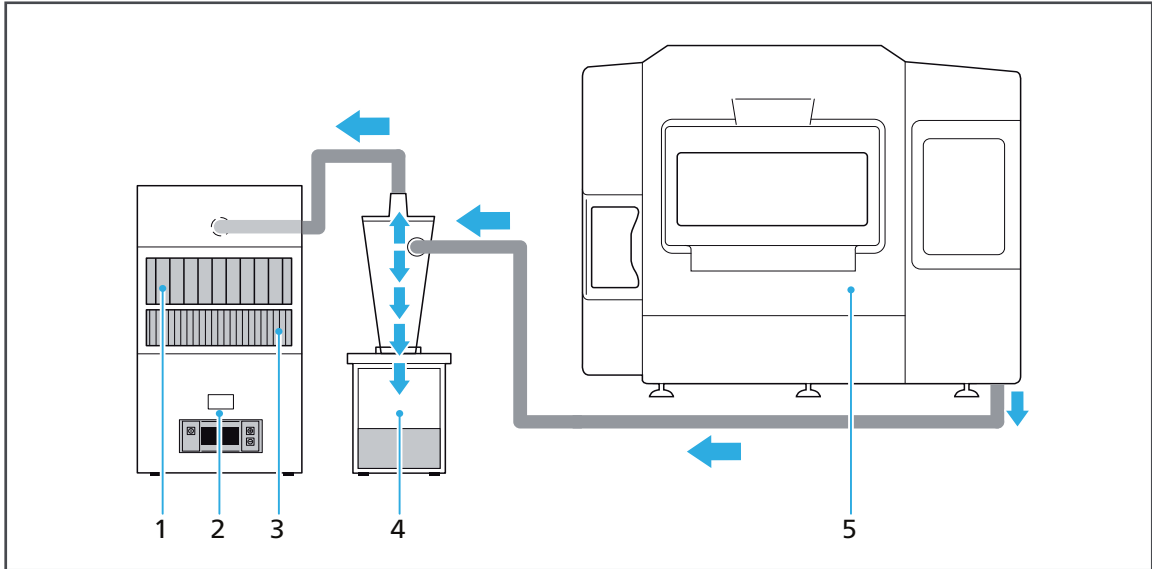
## Design and Function

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### 3.2.1 Function

The dust-containing air is detected in the milling machine (5) and transported over flexible tubes to the separator (4) in the suction unit (2).

Here the particles are separated into the various different filter levels (pre-filter (1), fine / main filter (3)) according to their filter category.



Simplified example (without base cabinet, example using the milling machine PrograMill PM 7)

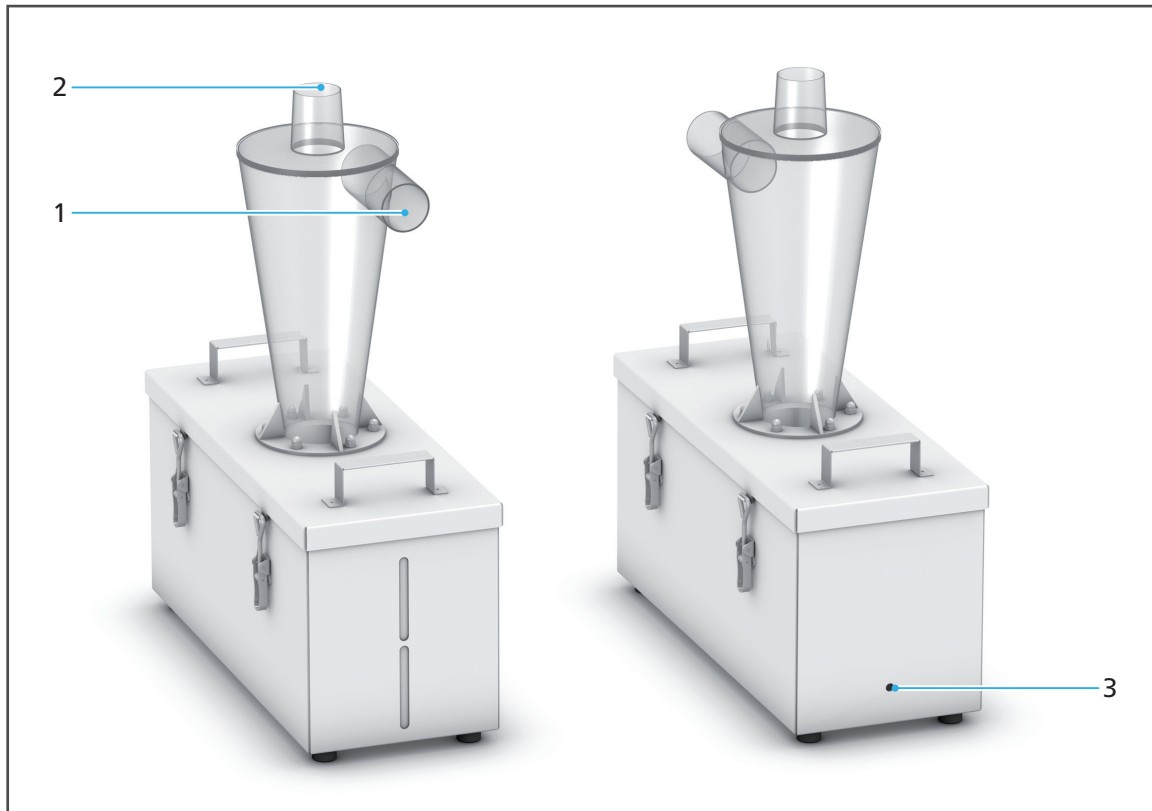
### 3.2.2 Connections and switch

#### Suction Unit



No.	Description	Function
1	Network connection	Connection to mains supply via supplied cold device cable
2	On/off switch (main switch)	Switch the device off. Caution: Switching off via the on/off switch does not disconnect the device from the power supply. To fully disconnect from the power supply, unplug the cold device cable from the wall socket.
3	D-Sub-25 interface	Connection of PrograMill Suction Unit to the milling machine via the supplied control cable (for the automatic control of PrograMill Suction Unit by the milling machine)
4	Connection for tube (0.5 m) / suction connection / air inlet	Connection between separator and suction unit
5	Grounding connection	Spiral cable connection for grounding the suction unit

### Separator



No.	Description	Function
1	Tube connection (2.5 m) / air inlet (marked IN)	Connection between separator and milling machine
2	Tube connection (2.5 m) / air outlet (marked OUT)	Connection between separator and suction unit
3	Grounding connection	Spiral cable connection for grounding the separator

### 3.2.3 Types of filter

#### Pre-filter

The PrograMill Suction Unit is equipped with a pre-filter (Z-Line / F6). By changing the pre-filter on a regular basis, the service life of the subsequent main filter (particulate air filter) will be significantly increased. At the latest, the pre-filter must be changed when the main filter is replaced.



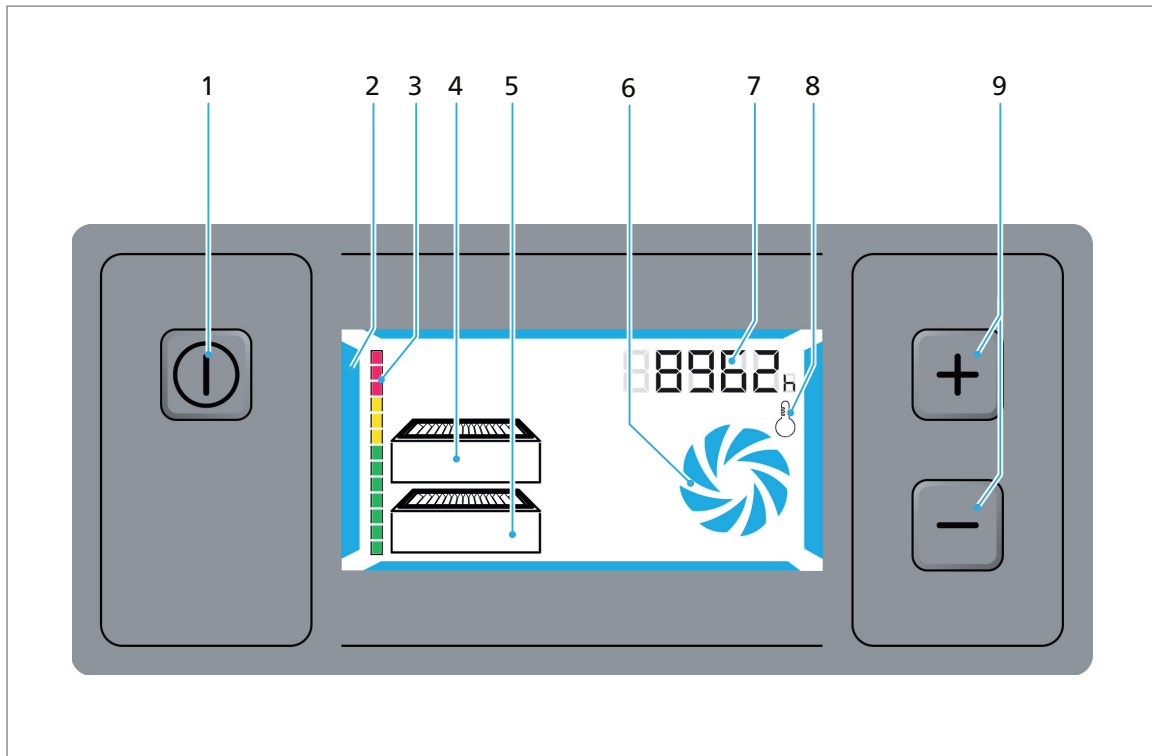
#### Fine / main filter

The fine / main filter (fine dust filter H13) guarantees that more than 99.95 % of the extracted fumes and dust particles remain in the filter (according to DIN EN 1822). This also applies when the filter insert is either full or partially saturated. As the saturation level increases however, the suction performance of the PrograMill Suction Unit will decrease.



### 3.2.4 Display

During manual operation, the unit is controlled via the display. During automatic operation, the PrograMill Suction Unit is controlled automatically via the milling machine ("Operation", page 37).




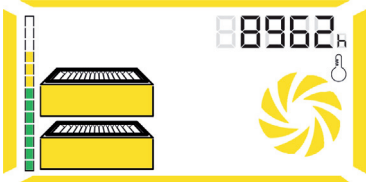
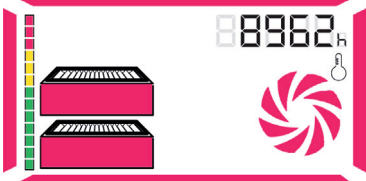
No.	Description	Function
1	Run / Standby key	Switch the PrograMill Suction Unit on (when the on / off switch has been activated) or change to standby-mode
2	Device status indication	Information on the status of the PrograMill Suction Unit (all components): <ul style="list-style-type: none"> <li>• blue: PrograMill Suction Unit in the stand-by mode</li> <li>• green: Device status OK, filter saturation at all filters OK, turbine running, temperature OK</li> <li>• yellow: Possible reasons: 60% filter saturation achieved, order filter</li> <li>• red: Possible reasons: Maximum filter saturation achieved, change filter immediately, turbine out of order, temperature critical.</li> </ul>



No.	Description	Function
3	Filter saturation display	Information on the status of all filters: <ul style="list-style-type: none"> <li>• green: Filter saturation OK</li> <li>• yellow: 60% filter saturation achieved, order filter</li> <li>• red: Maximum filter saturation achieved, change filter immediately</li> </ul>
4	Filter status display - pre-filter	Information on the fill level / saturation of the pre-filter (colour according to the colours described in (3))
5	Filter status display - fine / main filter	Information on the fill level / saturation of the fine / main filter (colour according to the colours described in (3))
6	Turbine status display	Information on the status of the turbine: <ul style="list-style-type: none"> <li>• blue: Turbine not turning, PrograMill Suction Unit in the stand-by mode</li> <li>• green: Turbine is turning, PrograMill Suction Unit in operation</li> <li>• red: There is a fault at the turbine, the PrograMill Suction Unit is at a standstill.</li> </ul>
7	Suction performance and operating hours display (example: operating hours in h)	Use the keys + and - to change between the suction performance display and the operating hours display.
8	Temperature error display	Information about the temperature status: <ul style="list-style-type: none"> <li>• Off: Temperature OK</li> <li>• red: Temperature error</li> </ul>
9	keys + and -	Increase or decrease the suction performance in the unit / change between suction performance display and operating hours display

## Design and Function

The unit status display (2) and filter saturation display (3) together show the filter saturation of all filters within the PrograMill Suction Unit:

Filter status display (3)	Unit status display (2)	Description / action
green	<p>green</p> 	Filter saturation at all filters OK
yellow	<p>yellow</p> 	<p>The last yellow level on the filter saturation display has been reached:</p> <ul style="list-style-type: none"> <li>• Indication "filter full" via the interface to the milling machine</li> <li>• Check filter status and if necessary order a new filter</li> </ul>
red	<p>red</p> 	<p>The red level on the filter saturation display has been reached:</p> <ul style="list-style-type: none"> <li>• Maximum filter saturation reached</li> <li>• Acoustic signal sounds</li> <li>• Change the filter</li> </ul>

## 4 Transportation and Assembly



Transportation, set-up and assembly are carried out by your sales or service partner and a Digital Instructor as part of your PrograMill System Instruction (milling machine etc.)

Do not perform the tasks described below alone!

---

### 4.1 Choosing the location site

Before setting up your device, select a suitable location site.

Make sure the following requirements are complied with:

- ▶ Observe the technical specifications for the operation and set-up site ("Supporting documents", page 8, checklist for your PrograMill system).
- ▶ Do not use in rooms with combustible anaesthetics or other flammable gasses and substances.
- ▶ Do not place or operate the device in a potentially explosive environment.
- ▶ In order to avoid overheating or corrosion on the device, only operate the device within the permissible temperature range/ambient conditions ("Ambient conditions for operation", page 53).
- ▶ Protect the device from moisture and heat (direct sunlight, radiators or other sources of heat).
- ▶ Operate the device in a dust-free environment, as ambient air is sucked in, the device turbine will become polluted and the filters will become clogged faster.
- ▶ Place the device on a stable, even, non-slip and clean working surface. Note that the machine feet can leave marks on sensitive surfaces.
- ▶ Ensure the device is easily accessible.
- ▶ Ensure a minimum distance of 10cm around the device so that the ventilation slits are not restricted.
- ▶ Do not cover the ventilation slits on the separator and the suction unit.
- ▶ Ensure sufficient clearance on all sides of the device for easy access to the flaps, machine connections, in particular the on/off switch.
- ▶ Risk of stumbling and falling! Avoid clutter in the workplace, keep the workplace clean, safely store cables and peripheral equipment.

### 4.2 Transportation of the device to the place of work

---



**WARNING! Risk of injury from the device tipping over or falling down.**

- ▶ Only use suitable means of transportation (e.g. fork lift truck, capacity min. 60 kg).
  - ▶ Secure the device with suitable transport guards (e.g. tension belt) to prevent falling.
  - ▶ Avoid impact, jerky movements and vibration during transportation.
  - ▶ Stay well clear of suspended loads or raised parts.
  - ▶ When unloading, pay attention to where the centre of gravity in the package lies.
- 



**WARNING! Risk of injury due to heavy lifting.**

- ▶ Only lift the unit with the aid of a fork lift truck or with a sufficient amount of persons to carry the load (min. 60 kg).
  - ▶ Unpack the device after transportation.
- 
- ▶ Move the device in its original packaging by means of transportation to the defined location.
- 

### 4.3 Unpacking the unit

The suction unit is delivered in a padded box.

---



**WARNING! Risk of injury due to heavy lifting or dropping down the device.**

Back injuries due to overloading, crushing of limbs.

Damage to the device.

- ▶ Lift the unit out of the box with the help of sufficient persons to carry the load (min. 60 kg).
- 



**CAUTION! Open the package using sharp tools.**

Cutting injuries.

Scratching of the housing.

- ▶ Caution when using tools.
- 

1. Open the box on the top side.
2. Carefully turn the box.
3. Remove the box from the contents. Be careful that the box contents do not fall out.
4. Remove the Styrofoam parts from the components.



We recommend that you keep the packaging for possible maintenance and correct transportation.

---

### 4.4 Checking the delivery contents and condition

1. On receipt, check the device ("Unpacking the unit", page 28).
2. Check that all contents are complete ("Delivery form", page 54).
3. Check all components for transport damage.
4. Report any transport damage or missing components immediately.

### 4.5 Setting-up the unit

You can place the PrograMill Suction Unit in the PrograMill Base cabinet, which can be ordered separately, or on another suitable surface under the milling machine.

- Location site selected ("Choosing the location site", page 27)
- Device unpacked ("Unpacking the unit", page 28)
- When using the PrograMill Base cabinet:** PrograMill Base cabinet set up, pull-out shelf extended (Operating Instructions PrograMill Base, "Supporting documents", page 8)



**WARNING! Risk of injury from heavy lifting or dropping the device.**

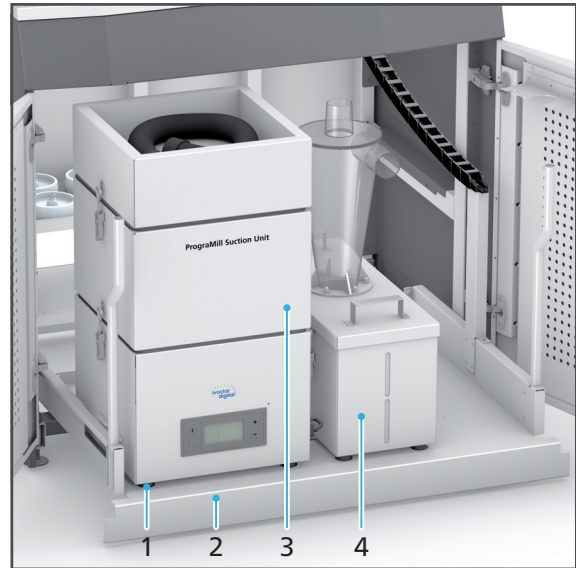
Back injuries due to overloading, crushing of limbs.

Damage to the device.

- ▶ Only lift the appliance with the aid of the fork lift truck.
  - ▶ Secure the unit against tipping throughout the entire transport.
  - ▶ Lift the unit off of the fork lift truck with the help of sufficient persons to carry the load (min. 60 kg) and place it onto the installation surface.
-

### Positioning when using the PrograMill Base cabinet

1. Place the suction unit (3) onto the PrograMill Base pull-out shelf with the display pointing towards the front (2), so that the unit's feet (1) are positioned in the corresponding indentations in the shelf.
2. Place the separator (4) to the right of the suction system (3) on the pull-out shelf, so that the separator's feet are positioned in the corresponding indentations in the shelf.



### Positioning without the PrograMill Base cabinet

3. Place the suction unit and separator below the milling machine on a stable, flat, non-slip and clean surface (check the length of the cables and tubes to the milling machine).

## 5 Initial Operation



The device set-up is carried out by your sales or service partner and a Digital Instructor as part of your PrograMill System Instruction (milling machine etc.)

Do not perform the tasks described below alone!

### 5.1 Connecting the PrograMill Suction Unit to the power supply

- ☑ Ensure that the power supply requirements are correct ("Electrical safety", page 12, "Technical Data", page 52 and type plate, see "Marking and labelling", page 16)



Only use the supplied cold device cable or an equivalent replacement power cable from Ivoclar Vivadent.

1. Connect the cold device power cable to the power supply (1) on the suction unit.
2. **When using the PrograMill Base cabinet:** Lay the cold device cable in the corresponding fixtures within the base cabinet (see the PrograMill Base Operating Instructions).
3. Connect the other end of the cold device cable to the mains socket.

➔ Mains voltage is present on the device.



If at a later time you need to disconnect the unit from the power supply, disconnect the plug from the wall socket, not from the device.

### 5.2 Connecting the separator and the PrograMill Suction Unit

---

**!** **DANGER!** Leaking tube connections. Open appliance doors. Release of hazardous substances into the air circulation.

Risk of respiratory problems.

Danger to the environment.

- ▶ Check that all the tubes are securely in place and the appliance doors are securely closed.
- 

**!** Only use the supplied tube (**0.5 m**) or an equivalent spare part from Ivoclar Vivadent.

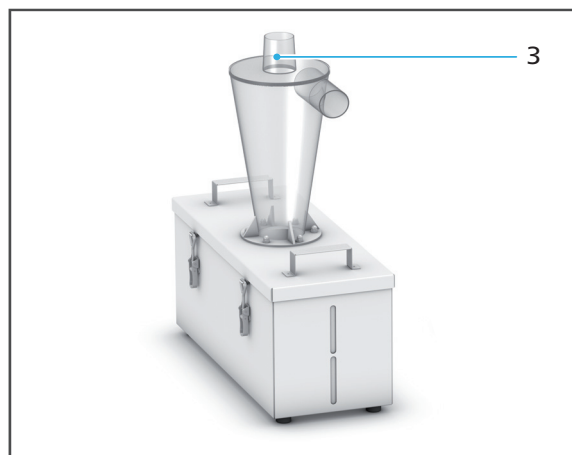
The ends of the tube (**0.5 m**) are designed in such a way that they cannot be confused and can only be connected to the respective connection point on the suction unit.

---

1. Connect the tube (**0.5 m**) at the connection point (1) on the suction unit (suction connection point / air inlet).
2. Connect the supplied spiral cable to the ground connection (2) on the suction unit.

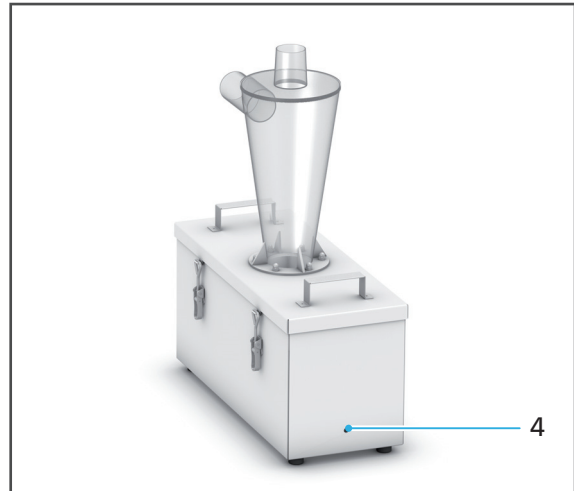


3. Connect the other end of the tube (**0.5 m**) to the connection point (3) at the separator (air outlet, marked OUT).





4. Connect the other end of the spiral cable to the ground connection (4) at the separator.



### 5.3 Connecting the PrograMill Suction Unit with the milling machine

---



**DANGER! Leaking tube connections. Open appliance doors. Release of hazardous substances into the air circulation.**

Risk of respiratory problems.

Danger to the environment.

- ▶ Check that all the tubes are securely in place and the appliance doors are securely closed.
- 



When connecting the PrograMill Suction Unit to the milling machine observe the Operating Instructions for the milling machines PrograMill PM3, PM5 or PM7 ("Supporting documents", page 8).

These Operating Instructions include information about the exact position of the suction connection and the suction control connection to the respective milling machine.

Only use the supplied control cable and the supplied tube (2.5 m) or an equivalent spare part from Ivoclar Vivadent.

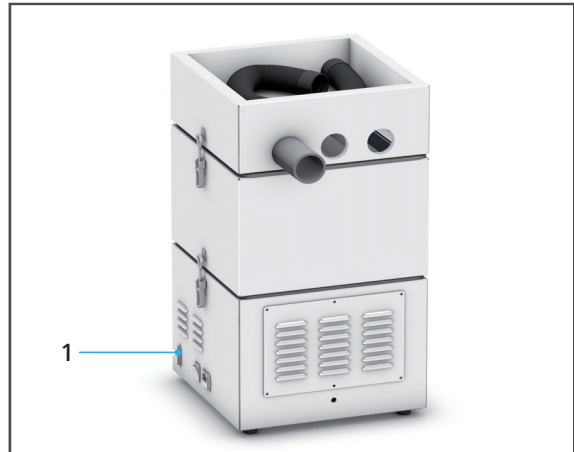
The ends of the tube (2.5 m) are designed in such a way that they cannot be confused and can only be connected to the respective connection point on the separator and the milling machine.

---

## Initial Operation

---

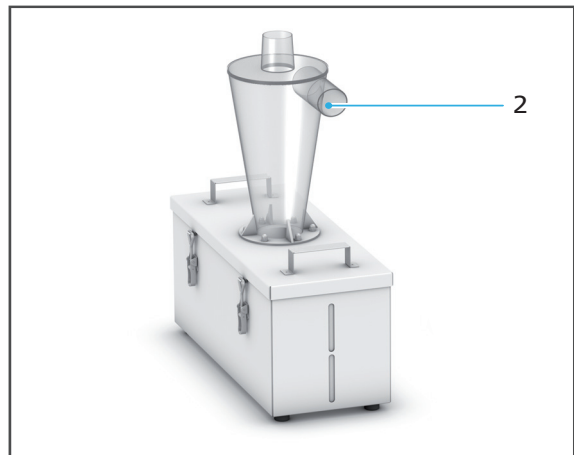
1. Connect the control cable D-Sub-25-interface (1) to the suction unit.
2. **When using the PrograMill Base cabinet:** Lay the control cable in the corresponding fixtures within the base cabinet (see the PrograMill Base Operating Instructions).
3. Connect the other end of the control cable to the suction control connection of the milling machine (see the Operating Instructions for the milling machine).



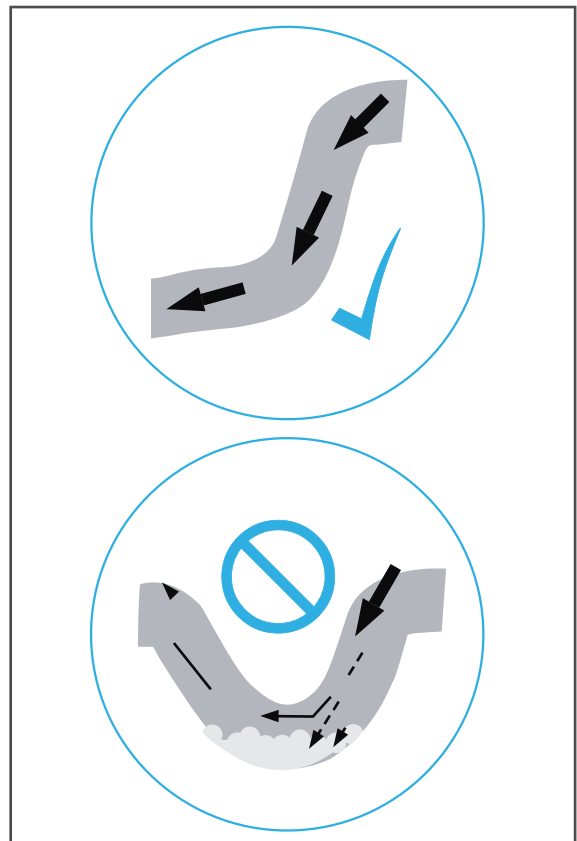
The tube connecting the separator to the milling machine must not be allowed to sag, as this will reduce the suction performance and milling residues may collect in the tube. Depending on your system set-up, the tube may therefore need to be shortened.

---

4. Connect the tube (2.5 m) to the suction connection at the milling machine (see Operating Instructions for the milling machine).
5. **When using the PrograMill Base cabinet:** Lay the control cable in the corresponding fixtures within the base cabinet (see the PrograMill Base Operating Instructions).
6. Connect the other end of the tube (2.5 m) to the connection point (2) at the separator as a trial (air inlet, marked IN).



7. Check to see whether the tube sags.
8. If the tube sags as in the illustration:
  - a. Mark the position at which the tube reaches the connection at the separator (when marking, add approx. 3 cm to the tube).
  - b. Cut the connecting tube at the marked area using a sharp knife.
9. Connect the tube (**2.5 m**) securely to the connection point at the separator.



### 5.4 Switching the PrograMill Suction Unit on for the first time

---

**⚠ DANGER! Leaking tube connections** Open filter module, open separator. Release of hazardous substances into the air circulation.

Risk of respiratory problems.

Danger to the environment.

- ▶ Check that all the tubes are securely in place, the filter module is securely fastened and the separator is securely closed.

---

The device is connected to the power supply ("Connecting the PrograMill Suction Unit to the power supply", page 31)

The separator and the suction unit are connected to one another ("Connecting the separator and the PrograMill Suction Unit", page 32)

The separator and the milling machine are connected to one another ("Connecting the separator and the PrograMill Suction Unit", page 32)

1. Check the stability of the unit.

2. Check the seal of the tubes.

3. Switch the on/off switch from **0** to **I**.

4. Activate the run / stand-by key (1) on the display.

➔ The run / stand-by key lights up green.

➔ The device is ready for use.

➔ You can set the suction power manually or allow it to automatically adjust via the connected milling machine ("Operation", page 37).



## 6 Operation

The PrograMill Suction Unit has two different control options:

- Manually via the suction unit display ("Starting and operating the unit manually via the display", page 37)
- Automatically via the milling machine (via the D-Sub-25 interface and the supplied control cable, "Starting and operating the unit automatically via the milling machine", page 38)

### 6.1 Starting and operating the unit manually via the display

☑ The device is ready ("Initial Operation", page 31).

1. Switch the on/off switch (1) from 0 to I.



2. Activate the run / stand-by key (2) on the display.
  - ➔ The run / stand-by key lights up green.
  - ➔ The device is ready for use.



All information regarding the display function can be found in section "Display", page 24.

### 6.2 Starting and operating the unit automatically via the milling machine

- ☑ The device is ready ("Initial Operation", page 31).
- ▶ Switch the on/off switch (1) at the suction unit from **0** to **I**.
- ➔ The unit can be automatically controlled by the milling machine via the D-Sub-25 interface and the supplied control cable.



### 6.3 Switching the unit off

Switch the unit either into stand-by mode or off completely.



Please observe: The unit is only entirely free from electricity when it is no longer connected to the power supply (remove the cold device cable plug from the power supply socket).

---

#### **NOTICE! Switching the milling machine or the suction unit off during an active milling procedure.**

The milling machine stops in an uncontrolled manner. Danger of collisions in the milling chamber during the subsequent restart of the device and therefore damage to the device.

Damage to the disc / or block.

- ▶ Do not pull the power supply plug during active processing.
  - ▶ Do not switch off the device during operation with the On / Off switch.
  - ▶ Wait until the active milling process has finished.
- 

- ☑ All active milling jobs have been successfully completed
- ☑ The milling machine is switched off (see Operating Instructions for the relevant milling machine, "Supporting documents", page 8)

1. Changing the unit into the stand-by mode: Activate the run / stand-by key (1) on the display.



2. Switching the unit off: Switch the on / off switch (2) on the suction unit from I to 0.  
The device will shut down.



3. Switching the unit off for cleaning and maintenance work: Remove the unit from the power supply.  
➔ The device now without electricity.

## 7 Device Messages and Troubleshooting

---



**DANGER! Opening the PrograMill Suction Unit components during active operation. Release of hazardous substances into the air circulation.**

Danger of electric shock.

Risk of respiratory problems.

Risk of crushing.

Danger to the environment.

- ▶ Switch the milling machine off.
  - ▶ Always remove the PrograMill Suction Unit from the power supply before maintenance work.
- 



The device informs you about the state of your device, pending tasks and problems via messages in the display panel.

Therefore, in the event of an error, first check the messages in the display panel ("Display", page 24).

If you are unable to resolve any problems by following the table below, contact your authorized service partner.

---



## Device Messages and Troubleshooting

Error	Possible reasons	Solution
<ul style="list-style-type: none"> <li>• The PrograMill Suction Unit will not start</li> <li>• No messages in the display</li> </ul>	Cold device cable not connected	Connect cold device cable
	The safety mechanism has not been inserted or is defect	Contact your authorized service partner
	No voltage on the socket used	<ul style="list-style-type: none"> <li>• Check power supply and restore if necessary ("Connecting the PrograMill Suction Unit to the power supply", page 31).</li> <li>• Switch machine on (again).</li> <li>• If the problem continues: Contact your authorized service partner</li> </ul>
	On / off switch at position 0	Switch the machine on ("Starting and operating the unit manually via the display", page 37)
	Incorrect voltage	<ul style="list-style-type: none"> <li>• Check the voltage</li> <li>• If the problem continues: Contact the in-house technician.</li> </ul>
<ul style="list-style-type: none"> <li>• The PrograMill Suction Unit will not start</li> <li>• The run / stand-by key in the display is blinking</li> </ul>	PrograMill Suction Unit is currently in the stand-by mode	<ul style="list-style-type: none"> <li>• Activate run / stand-by key</li> <li>• The stand-by mode is terminated</li> </ul>
<ul style="list-style-type: none"> <li>• The PrograMill Suction Unit will not start</li> <li>• A warning signal can be heard</li> <li>• The turbine status display lights up in red</li> </ul>	Turbine disorder / fault	<ul style="list-style-type: none"> <li>• Switch the unit off immediately</li> <li>• Contact your authorized service partner</li> </ul>

## Device Messages and Troubleshooting

Error	Possible reasons	Solution
Temperature error display lights up in red	Temperature problem	<ul style="list-style-type: none"> <li>• Switch the unit off immediately and allow to cool down</li> <li>• Check the ambient temperature and reduce if necessary</li> <li>• Check the suction tube for blockages and clean if necessary</li> <li>• Check if the ventilation slits on the suction unit and separator are clear and unhindered</li> <li>• Switch the machine on</li> <li>• If the problem continues: Contact your authorized service partner</li> </ul>
<ul style="list-style-type: none"> <li>• PrograMill Suction Unit is running</li> <li>• The device status display lights up in yellow</li> <li>• Filter saturation display lights up in the yellow area</li> </ul>	Filter is partially saturated	<ul style="list-style-type: none"> <li>• Order replacement filter</li> <li>• Change filter soon</li> </ul>
<ul style="list-style-type: none"> <li>• PrograMill Suction Unit is running</li> <li>• The device status display lights up in red</li> <li>• Filter saturation display lights up in the red area</li> </ul>	Filter is saturated	Change filter immediately
<ul style="list-style-type: none"> <li>• No / low suction performance</li> <li>• The filter status indicators do not show that a filter change is required</li> </ul>	Suction tubes are blocked, defect, bent or not connected	<ul style="list-style-type: none"> <li>• Switch the unit off.</li> <li>• Connect, clean, check, exchange the tubes</li> </ul>
	Suction performance has been incorrectly set	Adjust the suction performance at the display or through the milling machine
	Motor / control defect	<ul style="list-style-type: none"> <li>• Switch the unit off immediately</li> <li>• Contact your authorized service partner</li> </ul>
The PrograMill Suction Unit does not run smoothly or vibrates strongly	Motor bearings defect	<ul style="list-style-type: none"> <li>• Switch the unit off immediately</li> </ul>
	Contamination on the motor fan, filter could be leaking	<ul style="list-style-type: none"> <li>• Contact your authorized service partner</li> </ul>

Error	Possible reasons	Solution
Dust leaks from the suction unit modules or from the separator	The components are not correctly positioned on top of one another The fastenings are not secure	<ul style="list-style-type: none"><li>• Check the components</li><li>• Check the fit</li><li>• Close the fastenings</li><li>• If the problem continues: Contact your authorized service partner</li></ul>
	The seals are damaged	<ul style="list-style-type: none"><li>• Switch the unit off immediately</li><li>• Contact your authorized service partner</li></ul>

## 8 Cleaning and Maintenance Work for the User



This chapter deals exclusively with cleaning and maintenance of the PrograMill Suction Unit.

For information on cleaning and maintenance of the other PrograMill system components, such as the milling machine, tank or base cabinet, please refer to the operating instructions of the relevant components ("Supporting documents", page 8).

---



**DANGER! Improper cleaning and maintenance of the appliance. Failure to observe the cleaning intervals according to the app and in these instructions.**

Danger to the user.

Damage to the device.

- ▶ Only carry out work on the device described in this chapter and assigned to the user.
  - ▶ Always carry out the cleaning tasks at the specified intervals.
  - ▶ Wear personal protective equipment.
- 

### 8.1 Cleaning and maintenance table



If a change of the pre-filter and / or fine / main filter is required, you will receive a message via the suction system display ("Display", page 24).

---

Interval	Duties	Responsible person	Reference
According to the message in the display ("Display", page 24)	Change pre-filter	Operator	"Changing the filter", page 47
	Change fine filter / main filter	Operator	
With visible pollution	Cleaning the housing	Operator	"Cleaning the housing of the suction system and the separator", page 45
Check the separator 2x per week visually	The separator is more than half full with milling residues: Empty the separator	Operator	"Emptying the separator", page 46

## 8.2 Preparing for cleaning / filter change

- ☑ The milling machine is switched off (see Operating Instructions for the relevant milling machine, "Supporting documents", page 8)
  - ☑ **When using the PrograMill Base cabinet:** Pull out the base cabinet shelf (operating instructions PrograMill Base, "Supporting documents", page 8)
1. Switch the unit off ("Switching the unit off", page 38) and unplug it from the power supply.
  2. Remove all tubes and cables.

## 8.3 Cleaning the housing of the suction system and the separator



**WARNING! Improper cleaning of the device. Voltage-carrying components come into contact with moisture. Voltage-carrying components are exposed.**

Danger of electric shock. Damage to the device.

- ▶ Never remove the housing cover.
  - ▶ Ensure that no liquids or items enter into the inside of the device.
- 

**NOTICE! Improper cleaning of the material changer with unsuitable equipment and cleaning agents**

Damage to / scratching of the device.

- ▶ Do not use brushes, tools, sponges with metal components, or any cleaning equipment other than that specified in this chapter.
  - ▶ Do not use sharp, chlorine-containing cleaners. Only use mild, pH neutral cleaning agents.
  - ▶ Do not wear jewellery such as rings, bracelets or watches when working on the appliance, especially when cleaning the inner chamber.
- 

- ☑ Prepared for cleaning ("Preparing for cleaning / filter change", page 45)
- ▶ Clean the housing with a soft cloth, dampened with tap water and a mild, pH neutral detergent.

### 8.4 Emptying the separator



The fill level of the separator is not controlled by the filter warning indicator from the suction unit. There is no specific message shown the display.

The fill level of the separator must therefore be checked regularly at least 2x per week visually through the viewing screen. If the separator is filled over half, it must be emptied to ensure consistent suction performance and to avoid damaging the suction system and the milling machine.

---



**DANGER! Emptying the separator during active operation. Leaking tube connections. Open separator. Release of hazardous substances into the air circulation.**

Risk of respiratory problems.

Danger to the environment.

- ▶ Only empty the separator when the suction unit is switched off and is without electricity.
  - ▶ Before reactivating, check that the tubes are all securely in place and the separator is securely closed.
  - ▶ Dispose of the milling residue in the separator according to the country-specific specifications ("Disposing of the unit and filter", page 50).
- 

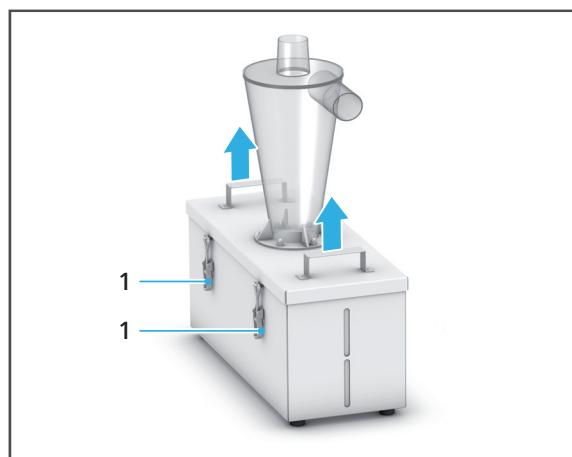
**NOTICE! Non-compliance with the checking and emptying intervals.**

Damage to the device.

- ▶ Observe the above-mentioned checking and emptying intervals.
- 

Prepared for cleaning ("Preparing for cleaning / filter change", page 45)

1. Open the separator fastenings (1).
2. Lift the cyclone from the separator.
3. Dispose of the milling residue in the separator.
4. Wipe the separator with a dry, soft cloth if necessary.
5. Place the cyclone onto the separator.





### **CAUTION! Close the fastenings.**

Danger of finger crushing.

- ▶ Close the separator carefully.
- 

6. Close the separator fastenings (1) again.

## 8.5 Changing the filter

The fill level of the individual filters must be checked regularly (min. 1x per week) in the display and if necessary exchanged, so that consistent suction performance can be maintained and damage to the suction unit and milling machine can be avoided. The following description applies for both filter.

---



### **DANGER! Filter change during active operation. Contact with live components.**

Danger of electric shock.

Damage to the device.

- ▶ Only carry out a filter change when the unit is switched off and is without electricity.
- 



### **DANGER! Filter change during active operation. Release of hazardous substances into the air circulation.**

Risk of respiratory problems.

Danger to the environment.

- ▶ Only carry out a filter change when the unit is switched off and is without electricity.
  - ▶ Ensure that the seals do not become damaged.
  - ▶ Before reactivating, check that the tubes are all securely in place.
  - ▶ Dispose of the filter according to the country-specific specifications ("Disposing of the unit and filter", page 50).
- 

### **NOTICE! Tapping out, blowing or washing the filter. Release of hazardous substances into the air and water circulation.**

Damage to the device. Danger to the environment.

- ▶ Do not clean the full filter, but instead, change and dispose of as described in this chapter.
-

## Cleaning and Maintenance Work for the User

---

- ☑ Prepared for cleaning (“Preparing for cleaning / filter change”, page 45)
- 1. Loosen the tube between the separator and the suction system at the rear of the suction system.
- 2. Open the fastenings (2).
- 3. Lift the lid (1) from the filter module (3).
- 4. Lift the pre-filter then the main filter, one after the other, from the filter module (3).
- 5. Replace the pre-filter and / or main filter depending on the fill level.



- 6. Insert the new main filter as shown with handles facing upward into the filter module (3).



- 7. Insert the new pre-filter as shown with the filter segments facing upward into the filter module (3).







**CAUTION! Finger crushed when setting-up the suction unit.**

Risk of crushing.

- ▶ Place the components carefully on top of each other and gently close the fastenings.
- 

8. Place the lid (1) onto the filter module (3).
9. Close the fastenings (2).
10. Dispose of the filter.
11. Secure the tube between the separator and the suction system at the rear of the suction system.

### 8.6 Finishing cleaning / filter change

1. Reconnect the tubes and cables ("Initial Operation", page 31).
2. Switch the machine on ("Operation", page 37)

# 9 Decommissioning

If you plan to take the device out of service for an extended period of time, return it for maintenance or repair or dispose of it, prepare the unit as follows:

1. Switch the unit off ("Switching the unit off", page 38) and unplug it from the power supply.
2. Remove all tubes and cables.
3. Clean the device and if necessary dispose of the filter ("Cleaning and Maintenance Work for the User", page 44).
4. Pack the device in suitable packaging (e.g. original packaging).

## 9.1 Storing the device

1. Ensure that the storage space meets the following requirements:
  - dry
  - vibration free
2. Ensure that the storage requirements are met ("Ambient conditions for storage and transportation", page 52).

## 9.2 Disposing of the unit and filter



The operator is responsible for proper disposal. The product must not be disposed of in the household waste. It must be collected separately from the household waste and disposed of according to local regulations for the disposal of electronic equipment in an environmentally safe manner or returned to Ivoclar Vivadent for disposal.

---

# 10 Repair



## **DANGER! Improper repairs on the device.**

Risk to the user and third parties.

- ▶ Repairs on the device must only be carried out by your authorized service partner using the valid version of the service manual.
- 

## 10.1 Authorized service partners



For information about the authorized service partners in your country, contact your local sales partner or Ivoclar Vivadent at: <http://www.ivoclarvivadent.com>.

---

## 10.2 Sending defective devices for repair



Use only the original packaging together with the corresponding foam material for transportation purposes.

---

1. Disconnect the device before returning it to the authorized service partner ("Decommissioning", page 50).
2. Send the device in suitable packaging (e.g. original packaging) to the authorized service partner.

# 11 Technical Data

Characteristics	Value
Suction unit measurements (W/H/D)	660 mm x 350 mm x 350 mm
Separator measurements (W/H/D)	240 mm x 660 mm x 525 mm
Suction unit weight (turbine module, filter module and lid)	Max. 36.5 kg
Separator weight	Max. 11.5 kg
Protection class	1
CE Classification	IP 30
Test standards	
Noise levels	Approx. 62 dB(A) (at 1 m distance)
Volume of free air	Max. 280 m <sup>3</sup> /h
Effective volumetric flow rate	Max. 30 –230 m <sup>3</sup> /h
Maximum static pressure	11000 Pa
Turbine performance	Approx. 1.1 kW
Network connection	100 – 240 V / 50 – 60 Hz
Input	1100 W
Drive type	Continuous
Serial interface	Sub-D 25

## 11.1 Ambient conditions

### 11.1.1 Ambient conditions for storage and transportation

Characteristics	Value
Permitted ambient temperature	-10 °C to +50 °C (max. 70 °C / 24h)
Maximum relative humidity	80%, excluding condensation
Acceptable ambient pressure	2000 m above sea level / altitude (TÜV approval)

### 11.1.2 Ambient conditions for operation

Characteristics	Value
Permitted ambient temperature	+5 °C to +40 °C
Maximum relative humidity	80%, excluding condensation
Acceptable ambient pressure	2000 m above sea level / altitude (TÜV approval)

## 12 Appendix

### 12.1 Delivery form

Item description	Number	Item numbers
Suction unit	1	
Separator	1	
Pre-filter Z-Line / F6	1	
Fine / main filter H13	1	
Cold device connection (connection to power supply)	1	
Tube 2.5 m (connection between milling machine and separator)	1	
Tube 0.5 m (connection between separator and suction unit)	1	
Tube with crevice tool, diameter 38 mm	1	
Control cable (D-Sub-25 interface, connection to milling machine)	1	
Operating Instructions PrograMill Suction Unit	1	

### 12.2 Ordering spare parts

1. When ordering spare parts, keep the following information ready:
  - Item number
  - Serial number
2. Contact authorized service partner.

### 12.3 CE marking / declaration of conformity



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Original operating instructions

Version: 1

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For software V4.0 and higher

This device has been developed solely for use in dentistry. Setup and operation should be carried out strictly according to the Operating Instructions. Liability cannot be accepted for damages resulting from misuse or failure to observe the Instructions. The user is solely responsible for testing the apparatus for its suitability for any purpose not explicitly stated in the Instructions.