

Manual



Argos²

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Safety Instructions

The Argos² foot care unit was produced according to strict quality criteria and uses the latest technology in its design. The images in this manual may vary slightly from the product you have bought as we are constantly developing our products.


This user manual includes a detailed description and explanation of how to use the Argos² unit. If you have any questions or suggestions, you can contact us by telephone or email.


This user manual belongs with the Argos² unit. Keep it somewhere safe. If you give this product to someone else, please include this document as it includes important information on how to correctly use the product.


Short description of functions


The Argos² is a device for the treatment of callus and nails. The handpiece is compatible with rotating tools such as diamond polishers, steel cutters and ceramic cutters. These can reach at speeds up to 40,000 rpm and therefore provide an efficient way of removing tissue. The direction of rotation can be changed by pressing a button. The integrated spray function emerges reliably bundles emerging dusts and the integrated filtered suction function effectively sucks up any dust particles. The speed of the bur, the amount of spray and the suction function can be adjusted via knob.


Safety Instructions


 The installation of the working area has to correspond to the relevant regulations. Set up the unit in such a way, that the louvers are not covered and the extracted air can escape well.

 To avoid the risk of an electric shock, this device might only be connected to a power supply with protective conductor.

 If you pull the power plug, it will stop the connection to the mains power supply. Set up the unit so that the power plug is always accessible. The power switch should also always be easily accessible.

 Only switch on the unit if the handpiece rests secured in the handpiece holder, or if you hold it safely in your hand.

 Prevent the permeation of liquids into the control unit. The electronic elements could be damaged. Clean the outside of the box only with a damped cloth. Be sure you unplug the unit before.

 Only use distilled water plus an anti-germ liquid (e.g. hadewe AquaHy, art. 8555). If you use other brands, pay attention to their manuals if you can use them for this purpose. Never use tap water. In case you are working with an alcoholic fluid

Safety Instructions

or other burnable liquids, there is always the danger of fire or explosion hazards. Never refill the tank directly over the unit to avoid in case you accidentally spill water, this will flow into the unit.



If spray liquid enters the suction hose, dry the handpiece so that the suction hose is at the bottom. Pull the suction hose off the control unit. Now place the handpiece below the control unit so that the liquid can drain away without getting into the handpiece. If necessary, replace a wet dust filter. The unit must be used again only when the liquid has completely evaporated. If the error occurs repeatedly, the unit must not be operated and must be repaired by a specialist.




Change the spray liquid every day. Always add disinfection additive to the distilled water. Make certain to observe the instructions of the manufacturer. Rinse the tank daily and fill it with fresh spray liquid every day.





Empty the unit if it is not in use for a longer period of time (e.g. before vacations). Clean out the tank. Set the spray function on maximum. Now start the spray function, and the spray liquid will spray for approx. 3 min. The fluid will be blown out of the complete spray system and handpiece.


Safety Instructions

 Only when pulling the mains cable, you can ensure that the device will be completely disconnected from mains check the mains cable regularly for damages, and in case of such let it change or repair from an authorized service center.

 Prevent your hair from wrapping itself around moving parts. If applicable, wear a hair net.

 This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children should be supervised not to play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

 When working with materials which might create dust or moisture use a drilling unit with suction or spray technique. Wear a nose and mouth protection. Always follow the safety instructions provided by the manufacturer of the materials being formed.

 For safety reasons you must always wear disposable gloves and protective glasses when

Safety Instructions

operating this unit. In addition, a face mask conforming to EN 14683 type IIR or EN 149 FFP 2 must also be worn.



When changing the filter it is advisable to wear a face mask conforming to EN 14683 type IIR or EN 149 FFP 2.



Ensure that the patient's foot and the hand-piece are held firmly in place during the work. To prevent injury, work with extreme caution on the foot of the patient, and use only light pressure.



To ensure that the bur/tool sits firmly in the chuck, do not work with tools which:

- have an oily shaft
- are worn
- are bent.



Before using the equipment, assure that

- the tool can be pushed far enough into the chuck (test this with a dipstick and clean if necessary),
- the tool will not cant/jam while clamping it,
- the inserted tool sits properly in the chuck
- the tool is approved for using it at the max speed (see manufacturer's instructions), or

Safety Instructions

- only use the speed required by the instrument,
- the tool is absolutely dry.



For safety reasons do not change the tool while the motor is running.



Switch off the unit immediately if

- the bur comes off during the treatment itself.
- the motor blocks during the treatment.



Only use the suction function if you have installed the suction filter. Check this filter every 10 operating hours. If it is full, please exchange it. A filter should be exchanged at least after 50 operating hours.



If spray liquid leaks from the unit, then a disturbance is present. The unit has to be separated from the socket and cannot be used any longer.



When the device is brought out of standby mode it will run with the rotation speed and suction power used last. Take care to not start the mill at an overly high rotation speed. Select the re-

Safety Instructions

quired rotation speed before changing the milling tool.



Never use the suction to vacuum any liquids or air/liquid fog which contains particles of liquids.



Always follow the operating instructions. Do not carry out any repairs, modifications or maintenance work yourself. This is only to be accomplished by an authorized specialist. The mains cable may also only be changed by the manufacturer or an authorized specialist. Maintenance records may be supplied to repair workshops and trained technicians upon request. Never remove the housing, while the equipment is plugged in as some components are live. A spare parts list may be supplied to qualified persons (repair workshops). No responsibility can be accepted for unauthorized or improper tampering with the unit, which nullifies the guarantee and any other liabilities.

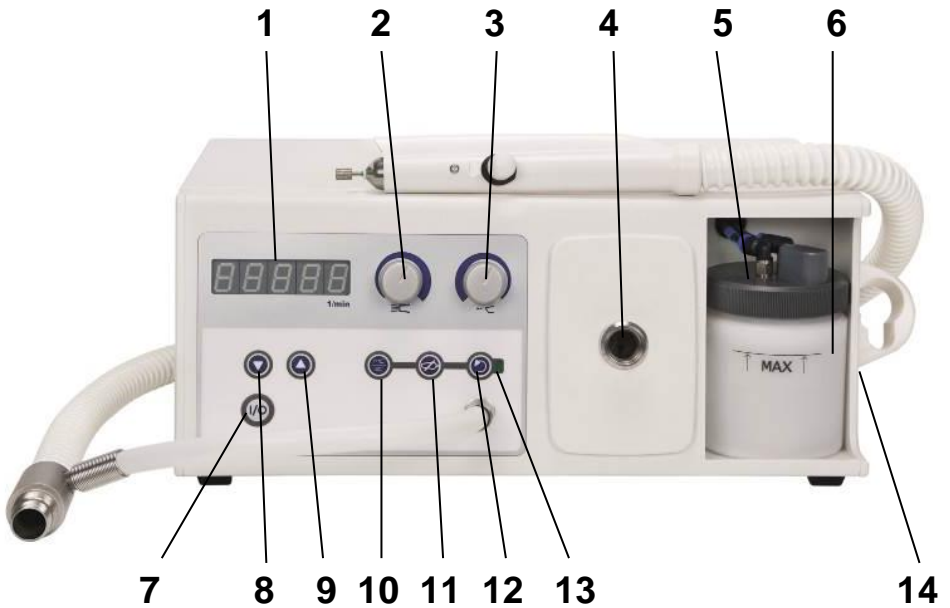
Cleaning & Disinfection



The device is designed to be compatible with rotating instruments which do not penetrate the skin or mucosal or inadvertently may still cause injuries. For this application please adhere to the cleaning and disinfection instructions provided below. After every treatment please carry out these steps:

- Remove the rotating tool (e.g. bur) first. To do so, pay attention to the instructions of its manufacturer.
- Remove clothing remains through wiping off easily the unit with a moistened paper cloth. Afterwards clean all surfaces with a disinfection cloth (e.g. Mikrozyd AF cloths of Schülke and Mayr).

Getting to Know the Unit



- 1 display
- 2 knob to start the suction and for adjusting the suction level
- 3 knob for adjusting the amount of spray
- 4 connection for suction hose
- 5 lid of the spray liquid tank
- 6 spray liquid tank
- 7 ON/OFF button (line voltage is not disconnected / standby)
- 8 reduce speed
- 9 increase speed
- 10 mode change (spray mode / suction mode)
- 11 ON/OFF
- 12 changing the direction of rotation
- 13 LED (shines during counterclockwise rotation)
- 14 foot switch port

Before Use

Please read through the instructions carefully before using the unit and carefully note the safety advice. Always keep this manual accessible to any users of the drill.

Area of Application

This device should only be used by people who have completed a foot care qualification. Before use the operator should familiarize with the device by reading this manual or being instructed by another.

The appliance may only be operated indoors. It can be used in a commercial or private environment.

The control unit can be set up in a cabinet, or can be used as a portable unit (e.g. in a carry case). It is suitable for the following scopes:

- foot care (milling, trimming and polishing),
- manicure (grinding, milling and polishing works).



The device is determined of operating rotating instruments, which will not penetrate the skin or mucous membrane if used appropriate, but could evoke damages accidentally.



In the area of pedicure you have to work with suction or spray techniques.

Startup Procedure

The working area must conform to the conditions described. Set up the unit in such a way, that the air slits are not blocked and the extracted air can escape well. To guarantee unhindered air flow there must a gap of at least 12cm to the right of the device.

Position the device so that the operating buttons are easy to reach and the outlet of the hose is a maximum distance of 60cm from the patient's foot. The unit should be 30-90cm from the floor.

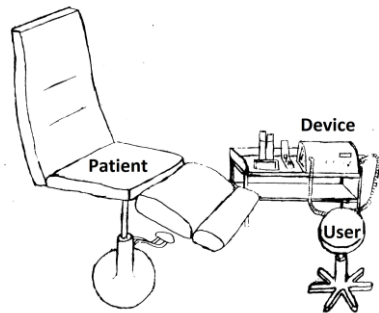


Image: Example of positioning of foot care unit in treatment room

Before Use

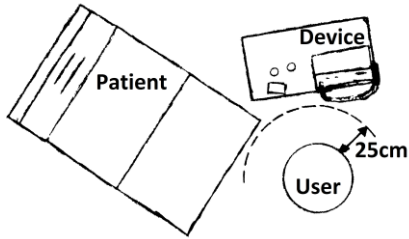



Image: Bird's eye view of work area

If you have a foot switch, insert its plug into the port (14) on the right of the device which displays this symbol .

Make sure, that the tank is filled with spray liquid. Check that the filter bag and dust filter are correctly fitted. Ensure that the tool is fixed.

On the back of the device you will find the main power switch. Press this switch to turn the unit on.



Take up the handpiece. To use the device, press the button (7) on the front of the unit.

Application

Work Steps

In the following section the order in which you should use the device is described. Additionally, the individual steps will be explained in detail. Read the complete manual before use.

After connecting the device to the power press the standby button (7) to make it start rotating. Use the switches (8) and (9) to select a rotation speed. Manufacturers often provide recommendations for optimal rotation speeds. However, it is important that you never exceed the maximum recommended rotation speed.

You can now choose a rotation direction using the button (12). The most commonly used direction is clockwise. Most milling instrument (steel instruments with steel cutters) are optimized for clockwise use. The rotation direction is irrelevant for diamond cutters and high-grade corundum sanders in terms of efficiency. Working anti-clockwise can be beneficial if, for example, the dust obscures your field of vision when working clockwise.

Now, you can turn on the spray by using the adjusting knob (3), you can set the amount of the spray liquid.

To use the suction press (10) and start the suction with the knob (2). After setting the speed and the spray amount or suction, you can start with working.

If you want to take a break or finish the job, press the standby button (7). The handpiece motor and suction/spray will turn off. The handpiece can now be placed in its holder on the right of the unit. Alternatively, you can switch the device to standby by pressing the button on the foot switch.

We recommend you disconnect the device from the mains power supply if it is not going to be used for a while. This will save electricity. The mains plug must also be removed when it comes to retiring the device.

Application

Work Positioning

The following images are examples of how to work on various parts of the foot. Always make sure that the foot is firmly gripped and that you can work freely and without strain.



Application



Application

Fill Spray Liquid Tank

Switch off the device. Pull out the spray liquid tank on its handle. Hold the cover of the tank in hand and unscrew the tank. Now fill it with distilled water and anti-germ liquid (e.g. AquaHy, art. 8555).



Do not exceed the maximum level when filling the tank.

Now turn the tank cover back on the tank. While screwing back the cover on the tank, make sure that is closed correct. Otherwise there will no pressure be built up. Put the tank back in the housing. Switch on the power switch in the rear of the unit.



Never use tap water. (Danger of calcification). Also, do not use explosive or combustible liquids e.g. alcohol.

Note: The filter in the tank (art. 3479) should be fully under pressure. Otherwise no spray liquid will be sucked in.



The spray liquid filter has to be fully under spray liquid, otherwise no liquid will be sucked in.

Filter Change



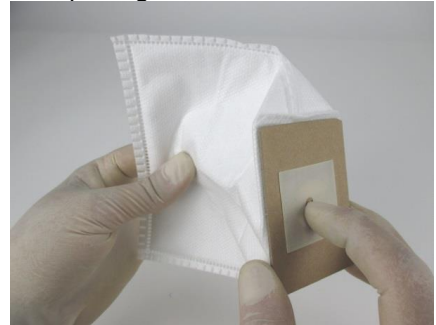
When changing the filter it is advisable to wear a face mask conforming to EN 14683 type IIR or EN 149 FFP 2.

Only operate the unit with a suction filter assembled. Control the micro filter after every 10 operating hours. Exchange a full filter immediately. A filter should be exchanged at least after 50 operating hours.

At first, open the dust chamber cover and remove the old filter.



Unfold the paper of the micro filter (art. 5179) and push your finger into the opening in the front.



Hold the filter in the middle to prevent it from bending and sliding off.

Application

Insert Bur

The handpiece is equipped with a chuck which can hold all burs with a diameter of 2.35 mm and usually are used in the fields of podiatry. To open the chuck, push the black knob forward with your thumb and leave it there.



Now insert the tool as far as possible. Pull back the black knob and the tool will be clamped.



For security reasons, only change the tool if the handpiece is turned off.

Spray Function

Turn on the spray function by turning the knob (3). Now the spray system will be filled automatically and a strong spray stream will be blown out of the handpiece for the

first 15 sec. Then you can adjust the requested spray stream while turning knob (3).

When turning off the unit or the spray function, the spray liquid is pumped back completely into the tank from the hose. With this process, a bubbling can be heard in the tank.

Drying Function/Tool Change

By pressing button (11), the bur and spray will be turned off. Now only air will come out of the top of the handpiece, which you can use to dry the spot of the recent treatment. Press the button (11) again to restart the spray and the bur.



This function can also be used to change your tools while the handpiece is not running.

Suction

Switch on the suction with button (2). The suction output can be regulated in 5 levels. You will see the selected level in the display. Level 0 would mean that the suction is turned off.

In case the suction motor overheats, the unit will switch off automatically. Leave the unit to cool off for a while before starting it again. Should the same failure appear again, please return the unit to your supplier for inspection.

Application

Adjusting the Speed

Put the handpiece back in the handpiece holder or keep it in your hand. Switch ON the unit with switch (7). Now you can adjust the requested speed with the switches (8) and (9). Choose the direction with switch (12).



When the device is brought out of standby mode it will run with the rotation speed and suction power used last. Take care to not start the mill at an overly high rotation speed. Select the required rotation speed before changing the milling tool.

Foot Switch

Commencement of foot switch

Only use the original hadewe foot switch to avoid damages. Insert the plug of the foot switch (art. 0970) into the socket (14) with this symbol



When working with a foot switch, take care that you only use instruments that are approved for use at the maximum speed of the device.

Function of the foot switch in spray mode

If you press the foot switch for a longer period, you will switch on/off the complete control unit.

While the spray is on, and you push the switch once, the spray stream will stop. If you push it a second time, the handpiece will stop. Push-

ing the switch, a third time, both functions will start to work again.

Function of the foot switch in suction mode

If you press the foot switch for a longer period, you will switch on/off the complete control unit. A short press will stop the bur.

Maintenance & Care

Washer

The top of the handpiece is equipped with a white washer (art. 4571). This washer has to be replaced by a new one **every 2 weeks (25 operation hours)**, unless exchanging it, spray liquid could enter the handpiece and cause a lot of damages of the internal parts.

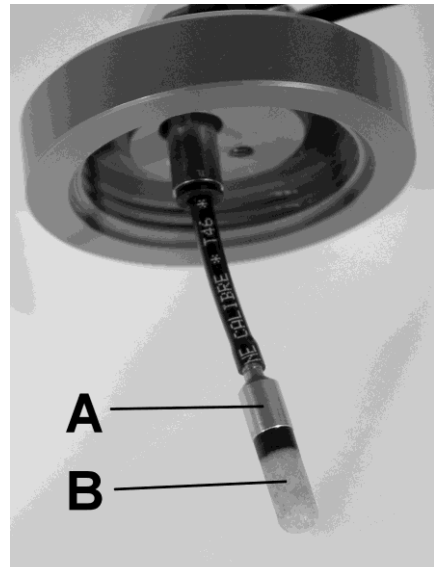
Screw off the top of the handpiece. Pull out the washer with some tongs. Look for little parts of the washer in the top and around. If you find some, remove such eventually. Please pay attention to the way it was installed. Push the new washer in the top.



Spray Liquid Filter

Even smallest parts of dirt could block the nozzle, which sits in the top. Avoiding such blockages, there is a spray liquid filter installed in the cap of the tank. We recommend to change this every time, when it is covered with some dirt, at least twice a year. Still make sure, no parts of dirt enter the tank and rinse it quite regularly.

Take off the cap of the tank. Hold the metal piece (A) in one hand and screw off the spray liquid filter (B). Now you can screw on the new filter.



Maintenance & Care

Chuck Cleaning

Because of the washer, very little dirt might enter the handpiece. In the course of the time, dirt can appear and might interrupt the performance of the handpiece. Therefore, clean the chuck monthly.

How to remove the chuck

Screw off the top of the handpiece with the spanner shown in the picture.

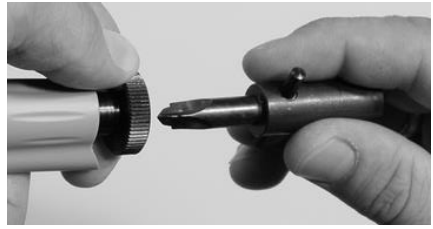


Now clean the inside of the handpiece and the top with the brush.

For opening the chuck, push the button forward.



Set the screw spanner (wrench) on the axle and hold it tight. Now use the front of the second spanner to unscrew the chuck.



To assemble the chuck, follow the steps in reverse order. Make sure that the chuck is opened during the assembly (the handpiece button must be in forward position) and is firmly applied afterwards.

How to clean the chuck

Soak the chuck in ethyl alcohol or a cleaning liquid for tools. Clean the slits of the chuck with the brush.



Use the brush to remove all dirt residues from the drill-hole of the chuck:



Maintenance & Care

Rinse the chuck very well, and make sure you let it dry well afterwards. Cover your index finger with a very little amount (just a drop) of oil and rub in between your thumb and index finger. Dab off the oil until your fingers is only covered with a very thin film of oil. Now move the chuck in between your thumb and index finger. There should be only a very thin film of oil left on the chuck. Please act according to the saying: Less is more.

Cleaning Function

Use the cleaning function if the nozzle is blocked. Turn the unit off. Remove the spray liquid filter at first. (For its instructions see paragraph above.) Fill the tank with distilled water. Close the tank and put it back into the unit. Adjust the amount of spray button (3) on maximum. Now press button (12) for two seconds. In the display you will find the message *CLEAN*.

If requested, you could cancel the process by pushing button (7). The complete cleaning process will last three minutes.

During the cleaning process, the liquid will be washed out of the whole spray system. Parts of dirt are rinsed into the tank. Do not use this liquid again, but clean the tank immediately after realizing a blockage in the nozzle. Otherwise the dirt parts might stick together.

Clean the spray liquid filter carefully

and put it back in the adapter. Refill the tank with new liquid.



Use the cleaning function only if the nozzle is blocked. Do not use the function if the unit works properly.

Maintenance Overview

What has to be done?	How often? Done by whom?
cleaning the chuck	monthly by user
changing the micro filter 5179	every 50 hours of operation by user (check after each 10 hours)
changing the filter 5116	every 200 hours of operation by user
changing the washer 4571	Every 2 weeks (25 operation hours) by user
changing the spray liquid filter 3497	every 6 months
maintenance by repair workshop (changing worn parts; housing; cleaning; check leakage current)	every 250 hours of operation, after one year at the latest by repair workshop

Handling Instructions



Never put the handpiece into any kind of liquid, and never oil or grease the handpiece. Clean its surface with a damp cloth. Pay attention, that no moisture or liquid enters the handpiece. Never use spray disinfection.



Never put any wet burs or instruments into the handpiece. Its moisture could damage the interior parts of the handpiece.



Any materials used by hadewe prevent a formation of rust. In cases in which a rust infestation was found within the handpiece, thorough inspections and examinations always have proved that the rust had a foreign origin (which was usually caused by the tools used in these circumstances). Even in high-grade steel instruments of well-known manufacturers, formation of rust can appear, e.g., through wrong treatment with chemical cleaning and disinfection liquids. This extraneous rust affects internal parts of the handpiece in form of rust bloom and causes pitting. Therefore, when you not working with the handpiece, always remove the bur/ tool from it.



Always make sure that you do not let the handpiece fall down or exposes it to any shocks. The ballbearings and the motor could be damaged by this. Only work with tools, which are flawless.

Do not work with tools which

- are bent or out of balance
- whose shaft is worn out or
- are rusty.



Working with faulty tools will cause a stronger vibration of the handpiece. A damage of the ball bearings, clamping technique or motor could be the consequence.



Working with high pressure will not improve the outcome of your work, since the motor will even be slowed down. A second disadvantage is the stronger impact on the ball bearings and the motor, which will shorten their life span in the long run.



Always working with maximum speed might have a similar effect. Please make sure that the speed setting you use is according to the work you are doing and the instruments you are working with.



In case of sending the device by mail remove the dust filter and empty the spray liquid tank before.

Troubleshooting

Handpiece vibrates, is very noisy and/or becomes warm in the front part.

Use of bent burs/tools → Use a different bur/tool to test this. The bur/tool itself can be tested with the hadewe Bur Shaft Tester (art. 4990) to see if it is bent.

Maximum allowed speed of the tool was exceeded, which caused a stronger vibration. → Pay attention to the tool (e.g. bur, capper and instrument) manufacturers handling details.

Bur/tool can be inserted only with difficulty, or not at all.

Use of bent burs/tools → Use a different bur/tool to test this. The bur/tool itself can be tested with the hadewe Bur Shaft Tester (art. 4990) to see if it is bent.

Chuck is dirty. → Clean the chuck according to the instructions in the manual.

Bur does not clamp or does not spin.

Chuck is not tightened well. → Tighten the chuck firmly according to the instruction in the manual.

Knob of the handpiece cannot be moved easily.

Chuck is dirty. → Clean the chuck according to the instructions in the manual.

Rubber ring under the knob twists while using it. → Twist it of 90°.

Unit does not work at all.

Check, if the main switch of the unit is turned on at the side of the unit.

Foot switch is used constantly or faulty. → Pull out the socket of the foot switch to see if this is the cause.

Switch off at main switch for 10s to reset the device.

The unit shows different sound levels at different sites of use.

The sound level varies according to the surroundings of the unit. If you set up the unit directly in front of a wall, the sound is reflected stronger, as if it would, while standing further away from a wall.

The motor of the handpiece stutters (e.g. 1 sec.) while switching it on.

Very seldom this error might occur. It would not damage the motor at all.

Suction function doesn't work.

The suction motor will turn off automatically if it overheats. Let the device cool down before using it again. Send the device off for inspection if this occurs repeatedly.

Troubleshooting

After lengthy use unit does not spray.

Unit is overheated. → Slots of the unit should not be covered or blocked. Let cool down the unit for a while.

The blue spray liquid filter (art. 3497) in the tank is blocked. → Change the filter.

HS, EE in Display

The motor does not start, because the chuck is still open. → Insert the bur and tighten it well (pull the black button backwards). Then start the hand-piece at max. speed.

Spray stream stutters.

There is air in the spray system. After 5 min running, this effect will disappear.

Acceleration of the spray stream.

Note: To reduce the starting time of the spray, turn the spray regulator on Max. After the spray started, adjust the stream to the requested amount of spray liquid.

Fluid leaks out of the unit.

Please be aware of the maximum filling level of the tank: Do not exceed the maximum level when filling the tank.

It does not spray.

Pressure cannot be set up in the tank, because the lid is not tightened well.

There are parts of dirt in the spray system. → Cleaning the spray system according to page 22.

Technical Data

0572 Argos²

total weight: 5,6kg
dimension: W314xH135xD223 mm
power supply: 230 V ~, 50 Hz
P_{max}: 300 W
fuse primary:
 F1, F2: 500 mA delay action fuse
 F3, F4: 3,15 A delay action fuse
fuse Sec. Thermo fuse
protection class I
accuracy of speed display: ±10 %

handpiece:
type B applied part
diameter: 17-22 mm
length: 152 mm
speed: 6000-40000 rpm
vibration: < 2,5 m/s²

Accessories & Spare Parts

<i>art. no.</i>	
0970	foot switch
3497	spray liquid filter
4571	washer
5116	filter
5179	micro filter
6158	cleaning brush
8555	AquaHy

The clamping system is designed for rotating instruments, which have a shaft of 2,35 mm in accordance with EN ISO 1797.

Operating Time

The device is designed for extended usage.

Ambient Conditions

The device is intended for use in dry closed rooms.

Operation:

Temp.: +10°C to +26°C
Rel. humidity: 25% to 75%
(not condensed)
Air pressure: 700 hPa to 1060 hPa

Storage:

Temp: -5°C to +55°C
Rel. humidity: 10% to 95%
(not condensed)
Air pressure: 500 hPa to 1060 hPa

Transport (up to 4 weeks):

Temp: -5°C to +55°C
Rel. humidity: 10% to 95%
(not condensed)
Air pressure: 500 hPa to 1060 hPa

Declaration of Conformity

We declare under our own responsibility, that the following foot care unit 0572 are consistent with the following guidelines:

2014/30/EU EMC guide line
2014/35/EU low voltage guide line


hadewe GmbH – Grambartstraße 10
30165 Hannover – Germany

Safety Check

A safety check must be done in compliance with the regulations of the country where the device is used. The inspection interval is once a year.

Technical Data

Disposal

 The device and filter may contain infectious material such as residual sanding dust or skin particles. Therefore, please bear in mind the following disposal instructions.

Disposing of the device

Old devices bought in Germany that correspond to the electronic device law should be sent directly to the manufacturer (hadewe). We will dispose of the device free of charge. The devices should not be taken to public disposal plants (WEEE Reg. No. DE20392713, b2b device). For disposal of this unit out of Germany, please contact the site where you bought this hadewe product.

Note for the disposal of the device/ treatment system

Wear protecting gloves of the class 2 in accordance with DIN 374-2 during the disassembling of the device. Also, wear a protective mask for your face according EN 14683 version IIR or EN 149 FFP2.

Disposal of dust filter and coarse dust filter

The filter bag and the coarse dust filter are considered low contaminated waste. Dispose those in in-transparent, liquid-tight, resistant plastic sacks and do not dispose them compressed in the regular household garbage.

Symbols



Caution!



Important note!



Follow instructions for use!



temperature limit
(indicates the lower and upper
temperature limit)



air pressure: permissible
range



air humidity: permissible
range



Keep dry!



alternating current



direct current



safety fuse



type B applied part



socket foot switch



date of manufacture,
name and address
of the manufacturer

hadewe

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30165 Hannover
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www.hadewe.de