



prepASH 2xx

Pre installation instruction

Please refer to manuals for full information



1. Requirements for installation of prepASH 2xx

- **Mains connection**

- Voltage: 230 VAC (+15/-20 %), for 115V mains connection use two phases
- Power consumption: 5.5kW
- Current input 25 A
- Frequency: 50 to 60 Hz
- Connector: CEE type, 3 pole, 32 A, male, only N (blue), L1 (brown) and PE (yellow green) connected
- Cable length: 2m



- **Permissible ambient conditions**

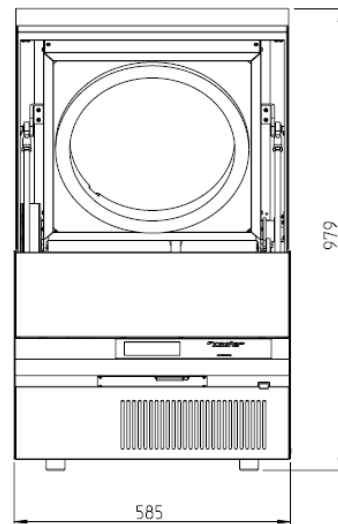
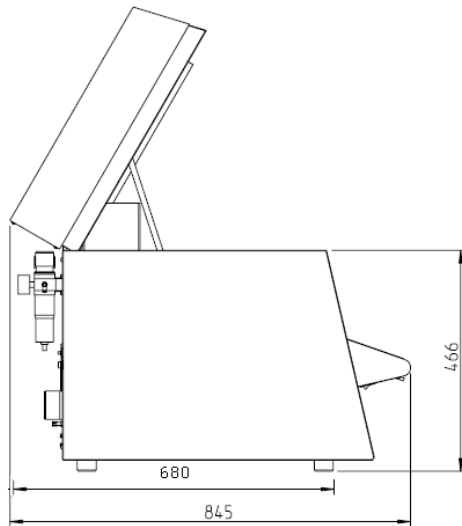
- Temperature: 5 °C – 35 °C
- Relative humidity: 25 % - 85 %, not condensing

- **Weight and dimensions**

- Weight 99 kg
- Dimension H(H) x W x D / 620(980) x 590 x 830 mm
(H) Height with sample chamber open

- **Requisite footprint**

- W x D / 590 x 830 mm (Requires a margin of 15 cm for security)



- **Gas requirements**

- **Compressed air:**

6 bar ($\pm 10\%$), with air turnover of 2-3 l/min

Compressed air oil-free and without condensation. (ISO 8573-1:2010, at least standard 7.4.4 (solid particles 5-10 mg/m³; water: vapor pressure dew point $< + 3\text{ }^{\circ}\text{C}$, water liquid -; oil 5 mg/m³))

Set 6bar at the maintenance unit of the prepASH. Note: 4bar is the absolute minimum to lift the hood! The compressed air inlet (AIR) is connected to the maintenance unit in the factory.

Tubing for compressed air with an inner/outer diameter of 6/8 mm or replace with any 1/8" connection, recommended material TPE-A (NOT INCLUDED IN DELIVERY).

- Optional working with Oxygen:

Oxygen 99.5 % purity, 3 bar ($\pm 10\%$), 0 – 9 l/min

The process gases can be fed in via the terminal connections (10) with hoses (outer $\varnothing$ x thickness 4 x 0.75mm).

Tubing for process gases, recommended material TPE-A (NOT INCLUDED IN DELIVERY).

- Optional working with Nitrogen:

Nitrogen 99.5 % purity, 3 bar ($\pm 10\%$), 0 – 9l/min

The process gases can be fed in via the terminal connections (10) with hoses (outer $\varnothing$ x thickness 4 x 0.75mm).

Tubing for process gases, recommended material TPE-A (NOT INCLUDED IN DELIVERY).

- **Exhaust gas hose (included in delivery)**

- Diameter inner/outer 63/68 mm, length 2 m, flow about 40m³/h, Temperature about 50°C exhaust gases must be removed from the working room (hood)
- Installation not needed at exhibition and demonstration without sample running

2. prepDATA PC requirements

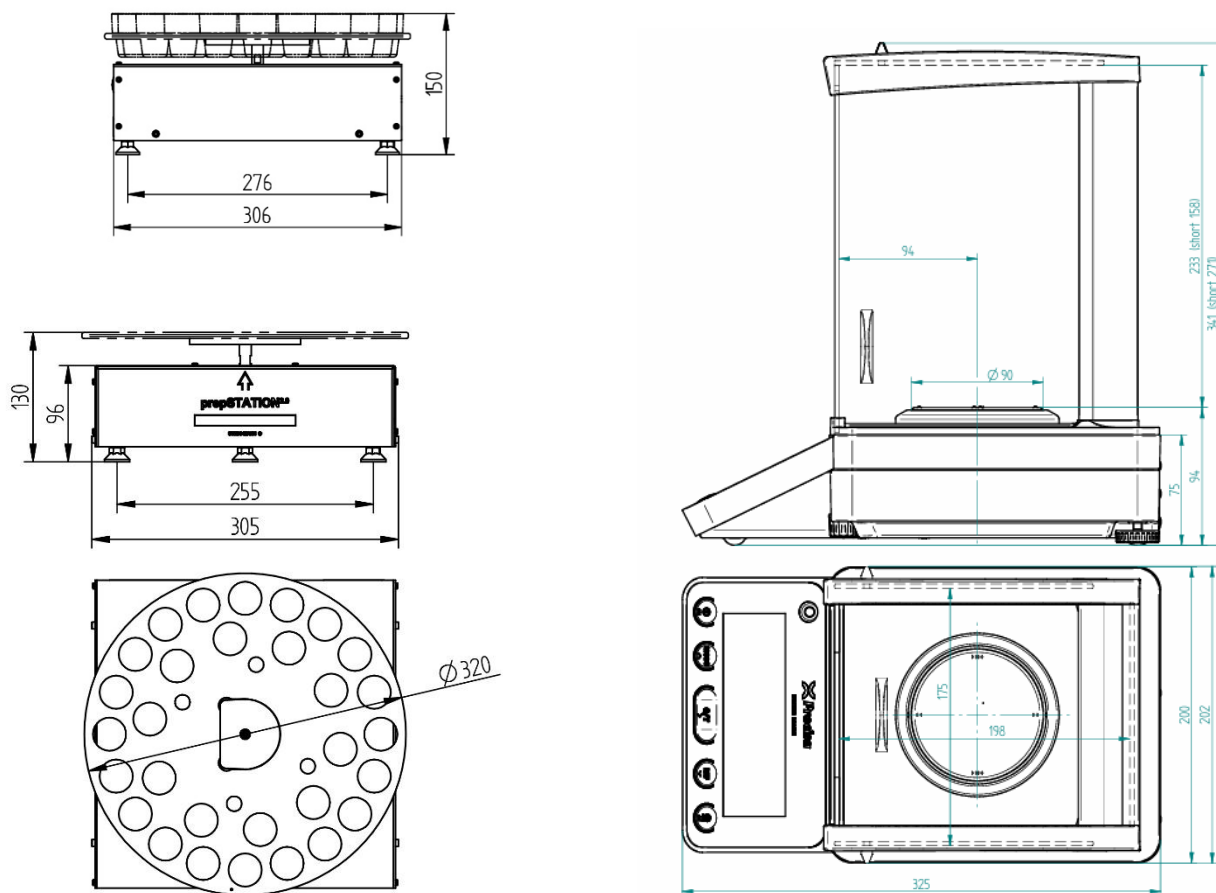
- **prepDATA 2.0 PC or Laptop requirements**
 - Windows 7 / 8 / 10 / 11
 - USB Host (for balance connection)
 - (if prepSTATION: 1x RJ45 Network, 2x USB)
- **prepDATA PC or Laptop requirements**
 - Windows XP / 7 / 8 / 10 / 11
 - Windows Office
 - USB Host (for balance connection)

3. Option Scrubber, (Büchi K-415, 340-9001 see details in manual of Scrubber)

- **Space required**
 - Dimension (W x H x D) 347 x 417 x 526 mm
 - Place scrubber on the left-hand side of prepASH or under the prepASH
 - Space required for the connection set on the left-hand side of prepASH (between scrubber and prepASH) approx. 100 mm
- **Mains connection**
 - Non, the scrubber is fed by prepASH
- **Cooling water**
 - Make sure that the cooling water flow rate $> 1.2 \text{ L/min}$ ($\leq 25 \text{ }^{\circ}\text{C}$) is pulse-free and does not exceed 2.7 bar.
 - Cooling water source tap must be capable of connecting to 6/9mm silicon hose, which is supplied with Scrubber
 - The scrubber has a drain hose connection which would need to be drained into a sink (if the water is not in a closed circuit)
- **Chemicals**
 - Wash solution: Na_2CO_3 or NaOH
 - Bromothymol blue as indicator
 - Optional active carbon: granulated, size: 2-6 mm
Never use charcoal in the form of powder or with a particle size below 2 mm - otherwise the adsorption vessel will get clogged and as a result the pump will get damaged.

• Option prepSTATION 2.0

• Space required



- prepSTATION BxD 305 x 306 mm, 320 x 320 (including sample plate)
- Balance 202 x 325 mm plus on each side 150 to 200 mm space
- Recommended space for easy work: 900 mm plus space for PC / Laptop

• PC or Laptop requirements

- Windows 7 / 8 / 10 / 11
- 1x RJ45 Network connection
- 2x USB

• Mains connection

- For balance (power adapter included) the prepSTATION is fed by balance
- For PC / Laptop

• Connections/Data cables

- Balance and Rotary Unit are connected to the PC by USB (cables included in delivery)
- prepASH can be connected either directly to a PC using a crossed (crossover) LAN cable or via a standard LAN connection to a network (**LAN cable not included in delivery**).

5 Installation

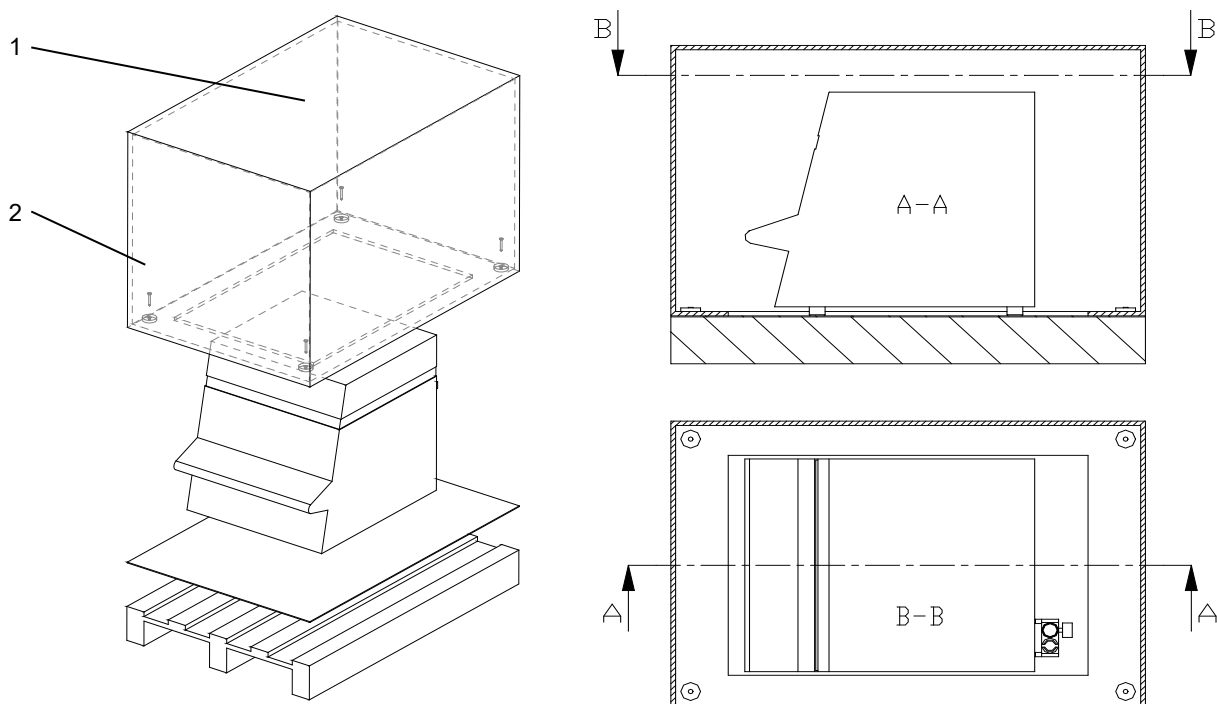
Dimension of package:

- 80cm x 120cm x 94cm (Pallet & wooden crate)
- Including the protective pyramid on top; the height is 117 cm instead of 94 cm

5.1 Installation

Observe the following points when you unpack the ashing device in order to avoid damage:

- Check the ashing device for any external visible signs of damage immediately after you unpack it. If you find that it has been damaged in transit, notify your Precisa service agent immediately.
- Read these Operating Instructions carefully before starting to work with the ashing device and pay particular attention to the safety instructions



Unpacking the prepASH

1. Open the box (1) at the top
2. Remove all the padding and accessories
3. Undo the 4 screws (2) on the base of the cardboard box
4. Lift off the cardboard box



NOTE

Retain the packaging. If the device is delivered to the factory by a transport firm for repair after a lengthy period of use, this may only be done in the original packaging. If devices are not properly packaged, they may sustain considerable damage in transit.

5.2 Assembly and Connection



NOTE

All the parts must be attached without exerting undue force. Do not apply any undue force. If you have any problems, the Precisa customer service representative will be happy to assist.

The ashing device does not come fully assembled. Carry out the steps in the sequence outlined below:

1. Arrange to have an electrician assemble the plug:
L →Phase 230 VAC
E →Earth
N →Neutral
2. Remove the protective stoppers from the requisite connections (process gases and waste gas nozzle) on the back of the device.
3. Attach the compressed air, the process gases, the mains cable, the waste gas hose and, if necessary, the alarm plug to the designated connection points
4. Regulate the pressure of the compressed air supply using the attached maintenance



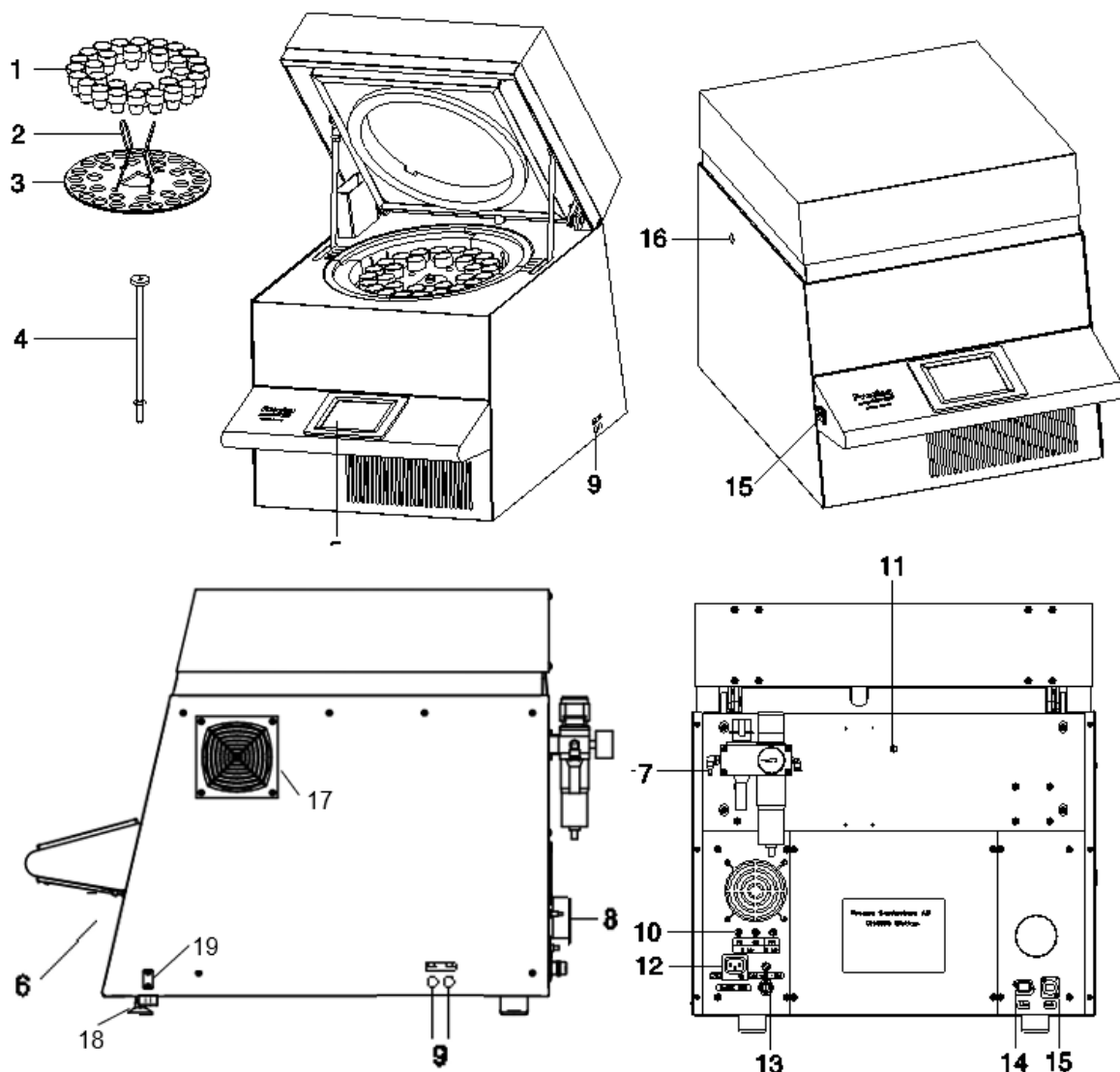
DANGER

The ashing device is operated with a 230 V AC supply. The electrical wiring work should be carried out by a qualified electrician.

Have the electrician check that existing electrical installations are in good working order and that fuses and cable cross sections are sufficient for the connection data on the rating plate for the ashing device.

The exhaust gas hose must be fed into an exhaust system in order to discharge harmful waste gases from the furnace chamber safely.

5.2.1 Structure of the Ashing Device



No.	Description	No.	Description
1	Crucible	11	Opening for external thermometer (only for calibration)
2	Plate holder	12	Mains connection for a scrubber or pump
3	Sample tray	13	Mains connection cable with 3-pin CEE plug (male)
4	Weighing pan	14	LAN connection
5	Touch screen	15	USB connection
6	Main switch	16	Mechanical coupling for scrubbers
7	Maintenance unit with compressed air connection	17	Intake opening for cooling (optional)
8	Exhaust gas connection	18	Leveling screws
9	Process gas flow regulation	19	Leveling tool
10	Process gas and compressed air connections	20	UPS connection