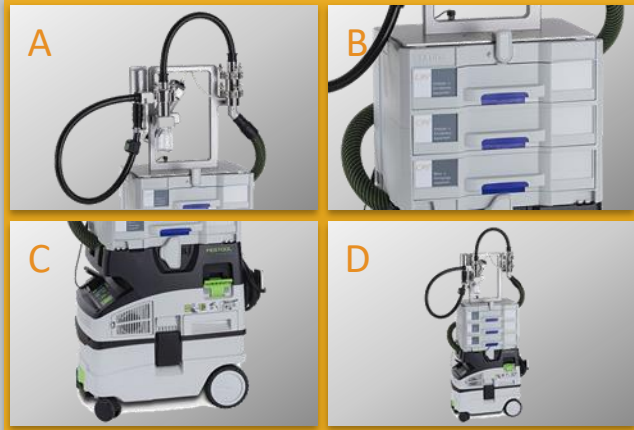


1. Setup of the C|PS²-Systems



The particle vacuum extraction system C|PS² consists of the extraction device itself, the vacuum cleaner and the equipment case.

- A) The extraction device (art. no. 6003017) serves to separate the extracted particles. The particles are collected in a laboratory bottle via a cyclone. An analysis filter serves as overload protection. Alternatively, the particles can also be sucked directly onto the analysis filter.
- B) The equipment case contains the complete analysis and extraction equipment such as suction nozzles, tweezers, analysis filters and archiving cards, laboratory bottles and cleaning accessories.
- C) The system is operated by a mobile vacuum unit, which generates the necessary volume flow.
- D) The individual components of the particle vacuum extraction system can be assembled modularly. The example illustrates the minimum required assembly of vacuum cleaner, equipment case and extraction device.

2. Grounding and differential pressure measurement

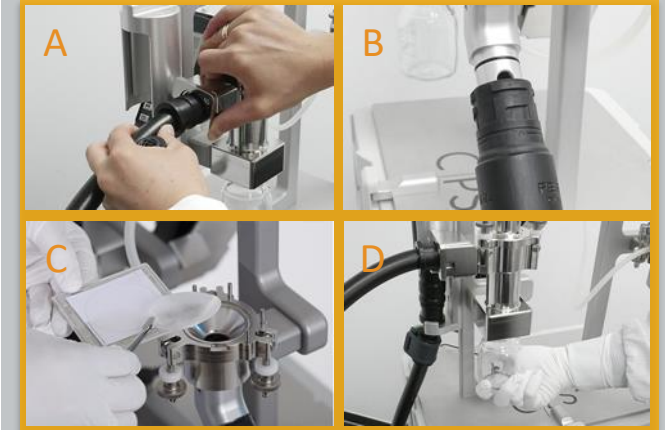


Grounding is carried out via the power connection of the vacuum cleaner unit using the grounding cable (art.-no. 61701). The differential pressure measurement is monitored with the measuring device Testo 526-1 (art.-no. 61714).

- A) Connect the grounding cable to a socket of the vacuum cleaner unit and to the grounding connection of the C|PS² system.
- B) Position the measuring instrument in the holder provided and insert the silicone tube into the (-) connection.
- C) The other end of the silicone hose is connected to the fitting below the filter unit.

To monitor the differential pressure, the measuring instrument must be switched on before performing a suction extraction. The set points can be found in the operating instructions.

3. Hoses, filters and laboratory bottles

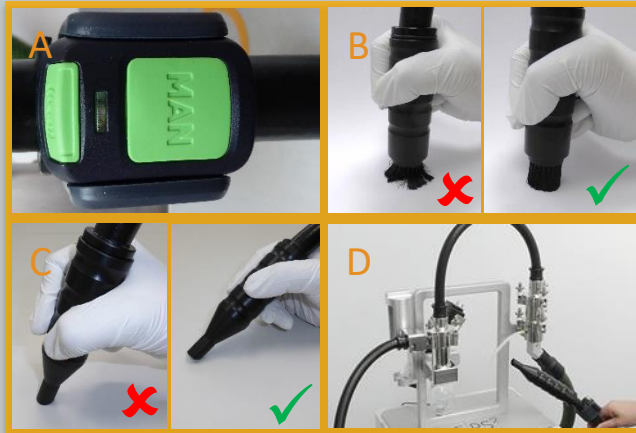


Properly cleaned components must be used for correct setup (see page 3 of the Quick Start Guide).

- A) To mount the suction hose, lift the locking lever to the side and insert the 1 m (art. no. 6002211) or 2 m (art.-no. 6002212) suction hose as far as it will go. Insert the connecting hose (art.-no. 6002213) as far as it will go into the upper part of the cyclone unit and the filter unit.
- B) Connect the vacuum cleaner hose to the vacuum cleaner connection (below the filter unit).
- C) Before each suction extraction and blank value determination, insert a new analysis filter (art.-no. 6002095) into the filter unit.
- D) When using the cyclone unit, a cleaned laboratory bottle (art.-no. 61574) must be screwed in for suction extraction and blank value determination.

Should only be sucked onto the analysis filter, the suction hose must be mounted directly on the filter unit without a connecting hose.

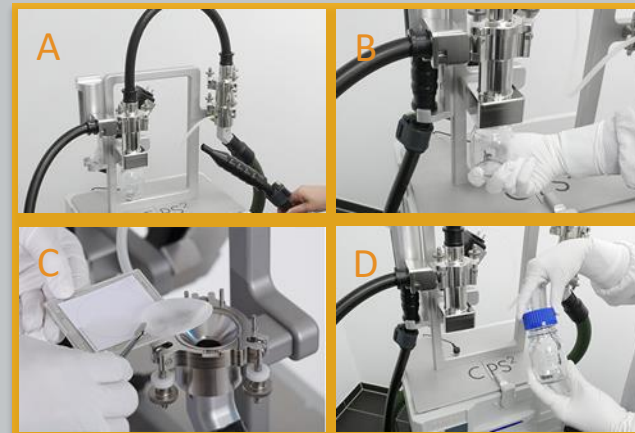
1. Nozzle guidance and blank value determination



The following points must be considered during suction extraction:

- A) In order to start suction extraction, the vacuum cleaner must be operated at the determined operating point (BP). The operating point is determined individually for each vacuum cleaner and marked on the control panel. The vacuum cleaner is switched on with the "MAN" button.
- B) When guiding the brush nozzle, care must be taken not to hold the nozzle at an angle. The contact pressure should not lead to deflection of the brush hairs.
- C) When guiding the suction nozzle, in contrast to the brush nozzle, make sure that there is an inclination of approx. 35° - 40°. This prevents the nozzle from blocking.
- D) Before each suction extraction, a blank value of the extraction device after basic cleaning should be determined. When determining the blank value, particle extraction must not be carried out. Hold the suction nozzle or brush nozzle upwards into the atmosphere and suck in air for two minutes.

2. Suction extraction via cyclone unit

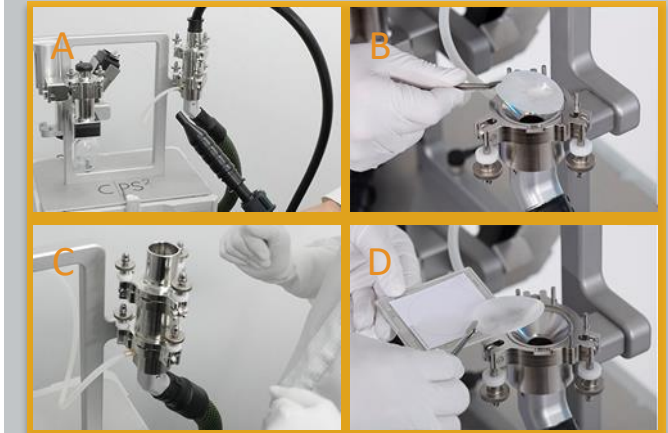


During suction extraction via the cyclone unit, the particles are separated in the cyclone. The analysis filter serves only as overload protection.

- A) For suction extraction via the cyclone unit, the suction hose and the connecting hose must be mounted as shown.
- B) Before a suction extraction, screw in a cleaned laboratory bottle (art.-no. 61574).
- C) Insert a new analysis filter (art.-no. 6002095) into the filter unit prior to suction extraction.
- D) After the suction extraction, unscrew the laboratory bottle and close it with the appropriate lid. Archive the analysis filter in a filter frame. Label the laboratory bottle and filter frame as required.

The system must be cleaned and returned to its original state at the end of suction extraction.

3. Suction extraction via filter unit



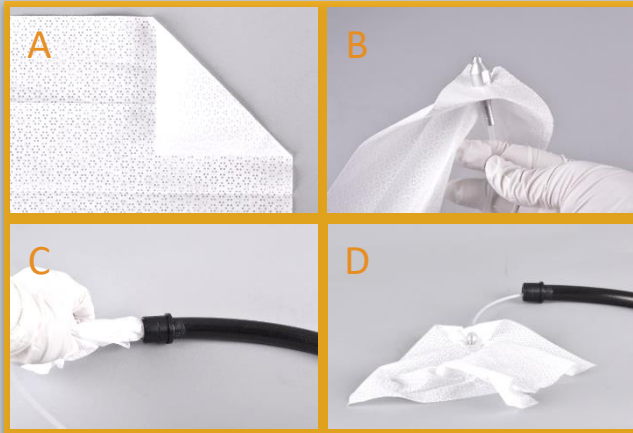
During suction extraction via the filter unit, the particles are separated directly onto the analysis filter.

- A) For suction extraction via the filter unit, the suction hose must be mounted as shown. The connecting hose is not required.
- B) Insert a new analysis filter (art. no. 6002095) into the filter unit prior to suction extraction.
- C) After the suction extraction, loosen the fastening screws and carefully lift off the upper part of the filter unit.
- D) Archive the analysis filter in a filter frame. Label the closed filter frame as required.

The system must be cleaned and returned to the initial state after the suction extraction has been completed.

⚠ If the components are reused, it is the responsibility of the operator to ensure their integrity by carrying out subsequent tests.

1. Cleaning the hoses

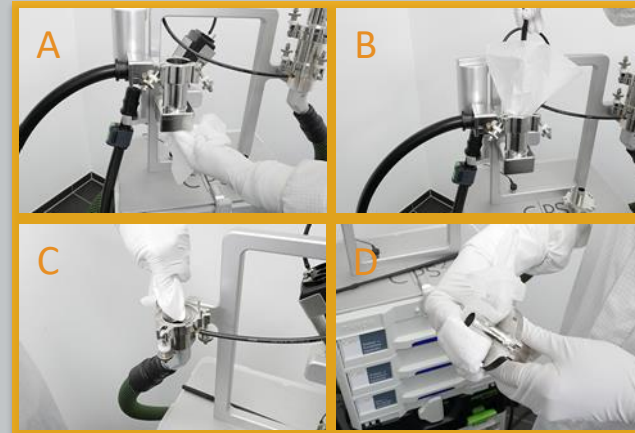


For cleaning the hoses (suction hose 1 m / 2 m and connecting hose), use a fresh alcohol-soaked cleaning cloth (art. no. 6002221) from the enclosed analysis and extraction equipment.

- A) Wrap the alcohol-soaked cleaning cloth at one corner.
- B) Pierce the cleaning cloth at the corner with the thread of the cleaning strand (art.-no. 61675). Then fix with the cone.
- C) Push the cleaning strand with the alcohol-soaked cleaning cloth through the corresponding hose until it emerges on the other side.
- D) Turn the alcohol-soaked cleaning cloth over and pull it back in the opposite direction.

After cleaning, close the hoses with the appropriate plugs.

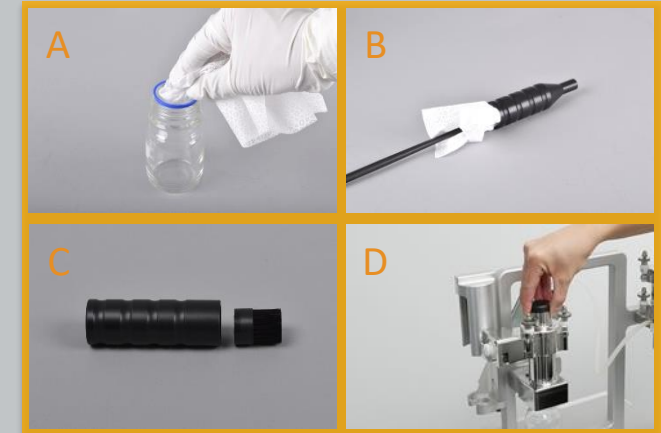
2. Cleaning the cyclone and filter unit



To clean the cyclone and filter unit, remove the hoses and the laboratory bottle and loosen the fastening screws.

- A) To clean the cyclone unit, remove the upper part and wipe all surfaces with a fresh alcohol-soaked cleaning cloth.
- B) Clean hard-to-reach interior areas or geometries using the cleaning rod (art.-no. 61606) and an alcohol-soaked cleaning cloth.
- C) To clean the filter unit, also remove the upper part (remove and archive the used analysis filter before cleaning) and wipe all surfaces with an alcohol-soaked cleaning cloth.
- D) Wipe the upper part of the cyclone and filter unit with an alcohol-soaked cleaning cloth. After cleaning, the upper parts can be reassembled and closed with the cover plugs.

3. Cleaning the laboratory bottle and nozzles



To clean the laboratory bottle and the nozzles (suction nozzle and brush nozzle), the cleaning rod, an industrial dishwasher and, if necessary, an ultrasonic basin are required.

- A) Clean the laboratory bottle in an industrial dishwasher or an alcohol-soaked cleaning cloth.
- B) Clean the suction nozzle (art.-no. 61784) and the handpiece (art.-no. 61783) with the cleaning stick and an alcohol-soaked cleaning cloth.
- C) Clean the brush attachment (art.-no. 6002567) in an ultrasonic tub with water and commercially available detergent. Allow the brush to dry sufficiently after cleaning.
- D) If the particle vacuum extraction system C|PS² is not used again immediately after thorough cleaning, close the openings with the appropriate plugs, screw in a clean laboratory bottle and store the entire system in the basic equipment case.