

# QLEEN

PURE WATER CLEANING SYSTEMS

## User information pole system (QLEEN Poles)

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Version 10 / 2016



## **User information pole systems (QLEEN Poles)**

We are delighted that you have decided for a Lehmann pole system. Before you start your cleaning works with the Lehmann pole system, we would like to provide you with some important user and safety information. We kindly ask you to read them carefully and to essentially comply with. As owner and operator of a Lehmann cleaning system also make sure that your staff has read this **“User information pole system (QLEEN poles)”**, too, and observes the safety and warning information.

Furthermore, we kindly ask you to consider and observe the General User and Safety information (see Lehmann publication **“General User and Safety Information”**).

The document on hand is the original user information. It was written in German language. Versions in other languages are translations of this original user information.

### **Manufacturer / Editor**

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### **Country of origin**

Federal Republic of Germany

# 1. Description of the pole system (QLEEN Poles)

Pole systems manufactured by Lehmann ensure that surfaces and facades up to a height of 20 metres can be cleaned fast and reliably. They enable a safe and efficient working at any time, directly from the ground. Lehmann pole systems are light and ergonomically designed. They convince with their longevity and handling. Lehmann pole systems are made of technologically high-quality material.

## CARBONPOLE:

Pole system made of high quality fibre-plastic-composite – very light and rigid

## TITANLIGHT:

Pole system made of a special aluminium alloy - for perfect stability even in case of special loads and for using special tools (e.g. the rotating brush system ROTAQLEEN)

### 1.1 Product overview (main components of a complete pole system – dependent on the relevant product selection)

- 1 Single pole (157 cm - 163 cm)
- 2 Single pole (78 cm - 80 cm)
- 3 Adapter for connecting cleaning tools (brushes)
- 4 Brush bow with brush or pad holder
- 5 Adhesive strap for fastening the hose system



## 2. Assemble pole set

### Prerequisite

The pole set must always be assembled vertically in front of the surface to be cleaned. Makes sure when assembling the poles that contact surfaces and threads are free from pollutions. The same applies for thread and contact surfaces of head parts, cleaning heads and plug connections.

### Proceeding

#### 2.1 Planning the pole set assembly

- > Measure or estimate the working height
- > Determine the needed number of poles (= pole set length)
- > Determine the type of poles (= CARBON or TITANPOLE)
- > Select the suitable cleaning tool (cleaning brush)

Special cleaning heads exist for every cleaning task (brushes, washer, pad holder) which can be provided as accessories. For cleaning inclined or horizontal surfaces, Vario joints can be used.

- ✓ Type and number of poles are determined. The cleaning head was selected.





## 2.2 Assembling the cleaning head

- ▷ Pick up the top pole

For the CARBONPOLE pole set, the top pole should always be a TITANPOLE half-pole.



- ▷ Screw the head element on the top pole until both contact surfaces are friction-locked connected with each other.

The head element (accessory) is a coupling element for fastening the cleaning head to the top pole of the pole set.



- ▷ Tighten the security wing screw at the top pole end friction-locked
- ▷ Plug the cleaning head on the head piece
- ▷ Push in the cleaning head to the end stop (the two lock pins at the sides must snap!)

✓ The cleaning head is correctly assembled on the top pole.



## 2.3 Connect the cleaning head with the hose

- ▷ Insert the hose ends into the plug connector up to the end stop.

✓ The cleaning head is correctly connected to the hose.



## 2.4 Screw in together /completing the pole set

- ▷ Screw the next pole to the top pole from the bottom
- ▷ Fasten the hose by using adhesive strap

Fasten the hose at every pole! Avoid canting, as otherwise the thread might get damaged. When screwing the pole set together, always rest the cleaning head (brushes, washer, padholder) on the surfaces to be cleaned. For every new pole, the cleaning head must be pushed up in vertical direction for one pole length (without losing the contact to the surface). Place the pole set safely in a building angle when interrupting the assembly or work.



- ▷ Continue the procedure until the desired working height (20 m maximum) has been reached.



As soon as the desired working height has been reached, secure the pole set against tilting by

- Placing it in a building angle or
- A second person holding the pole set from the ground or
- A second person, securing the pole set from the roof with a rope.

✓ The pole set is assembled completely and correctly.



## 3. Working with the pole set

When working with the Lehmann Pole System, we kindly ask you to also consider and observe the requirements of the General User and Safety information (see separate Lehmann publication “**General User and Safety Information**”).



Pole systems must only be used in accordance with the intended use and in a technically faultless manner:

- with keeping minimum safety distance of 40 m from above-ground power pylons/line
- not in case of approaching thunderstorm
- not at wind speeds exceeding 3.4 m/sec (= wind strength 2).
- only in accordance with the requirements of the „General User and Safety Information“



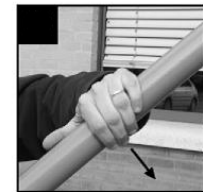
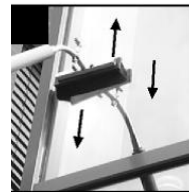
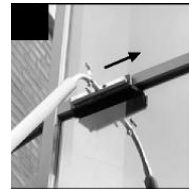
### Making work easier:

Move the lower hand in the area of hip and breast only:

- Optimum application of strength
- Optimum lever effect in the shoulder-arm-area
- Relieving shoulder-arm-musculature/-joints

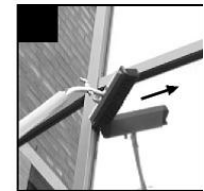
Do not work above shoulder height:

- Reduces the control over the pole set
- Overexerts the neck and shoulder musculature
- Do not work with the head bended back for longer periods of time. The higher the working height and the lower the distance from the wall, the stronger neck musculature and cervical vertebra are stressed.



### Planning the works:

- Work while going forward to recognize obstacles and tripping hazards in due time and to avoid them
- Right-handers work from the left to the right, left-handers from the right to the left
- Start with the highest reachable areas.
- Clean the frame first, the surfaces afterwards (= waste water runs over the surface when cleaning the frames = creation of streaks)
- Work top down to avoid that cleaned surfaces get in contact with waste water.
- Always guide the pole set in vertical line to avoid that it slips to the side.



### Procedure

- ▷ Guide the cleaning head (brushes, washer, pad holder) with calm up and down movements from row to row (row = width of the cleaning head) along the surface to be cleaned
- ▷ Slightly bend the cleaning head to the side during every change of row and for overcoming obstacles (frames, facade elements etc.), which reduces the frictional resistance of the surface (facilitates sideways movements)
- ▷ If needed, slightly press the pole set on the surface to be cleaned with the leading hand to increase the mechanical cleaning performance
- ▷ Avoid bumping the carbon poles on window boards or suchlike. That might cause a breakage and will lead to loss of warranty claim.
- ▷ Shorten the pole set to the required working height after every cleaned floor (see 4. "Disassembling the pole set")

### Correct setting angle of the pole set:

Setting angle (= angle between pole set and area of movement = ratio between working height and distance from the wall) amounts to 40° to 65° maximum. The table below shows how big the distance from the wall has to be for which working height:

Working height (m)	Distance from the wall (m)
Up to 3.5	1.5
3.5 - 7.0	2.5 - 4.5
7.0 - 13.5	4.0 - 6.0

## 4. Disassemble the pole set

The pole set must always be disassembled in vertical position from the surface to be cleaned. Only the lowest pole each is screwed off. The unscrewed poles are stored in the pole case of the QLEEN system (DISY), a separate pole wagon or a pole carrier bag (accessories). Pay attention that contact surfaces and threads are free from pollutions when disassembling the poles. Threads and contact surfaces must not be greased or lubricated as pollutions can easily stick to this. Instead, they are carefully rinsed with water first and dried with a soft, clean cloth afterwards. The same applies for the threads and contact surfaces of head pieces, cleaning heads and plug connections. Place the pole set safely in the building angle when interrupting the work.

### Preconditions

- The system is switched off
- The water conducting system is pressureless

### Proceeding

#### 1. Disconnecting the pole set

- ▷ Loosen the security wing bolt at the lowest pole
- ▷ Unfasten the adhesive strap
  - The hose comes loose when the adhesive strip is unfastened (single or double tube)
  - The hoses are sensitive! Due to this, loose hoses must be protected from driving over, bending and tripping over!

- ▷ Unscrew the lowest bolt
- ▷ Store the unscrewed (= loose) bolts safely
- ▷ Continue the pole disassembly until you reach the top pole

- Make sure that the contact surfaces and threads are free from pollutions

✓ The pole set is disconnected and stored safely.

#### 2. When the top pole has been reached: Unfasten the single and double hose from the cleaning head

- ▷ Pull of the hose end from the relevant plug connection (= push in the black/blue ring and pull out the hose end)

✓ Unfasten the relevant hose from the cleaning head

#### 3. Remove the cleaning head

- ▷ Strongly push in the two locking pins at the sides
- ▷ Cautiously loosen and remove the cleaning head
- ▷ Leave the head element on the top pole or unscrew it

✓ The cleaning head is removed from the pole set and stored safely.

## 5. Cleaning pole system and accessories

Cleaning the system and accessories regularly after every operation prolongs their life cycle. Thus, it is recommended to carefully rinse all hoses with tap water after finishing work, particularly after detergent solution was used. The thread and the contact surfaces of the pole system (QLEEN Poles) must be briefly rinsed with water and wiped with a soft, clean cloth inside and outside until dry.



- ▷ Rinse the pole system and all threads and contact surfaces with water
- ▷ Clean the outer and inner surfaces with a soft, clean cloth
- ▷ Lubricate with customary silicone spray, if applicable

✓ **All QLEEN Poles are cleaned, checked and ready for storage and transportation.**

## 6. Technical Customer Service

System users and operators are not allowed to implement any own repair works at the Lehmann Pole Systems. Such works are impermissible and result, in case of non-compliance, into a direct loss of warranty and guarantees. Repair works must be exclusively carried out by the Technical Customer Service of Lehmann Contract Traders or by the manufacturer, Lehmann KG. Regarding all repair and maintenance works, we kindly ask you to contact your Lehmann contract trader where you bought your cleaning system.

## 7. Accessories

The Lehmann KG offers a wide range of accessories and spare parts. In case of interest we will be pleased to send you the current overview. Just send a request to [info@lewi.de](mailto:info@lewi.de) or call us: **(+49) 03981 488 50**.

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