

## Viper

with GFK-rod



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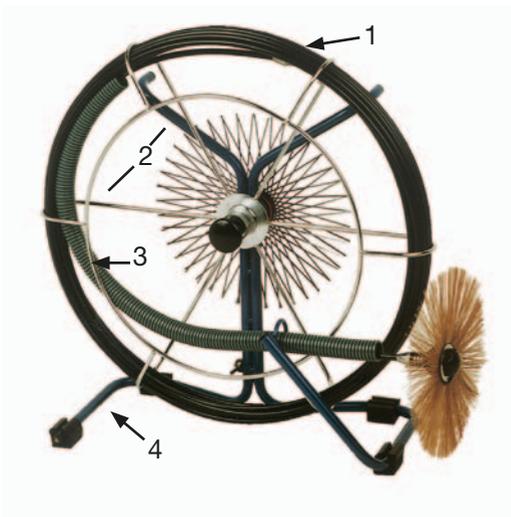
## 1. Important information

Carefully study and observe all items of these operating instructions before commissioning the unit.

In principle, the Wöhler Viper should only be used by skilled personnel for its intended purpose and within the specified range of data. Any liability or warranty for results established or for defects caused when using the unit is excluded by all means.

## 2. Description of the unit

The Viper with GRP rod is a revolutionary coiled rod system with a rotary (diameter 60 cm) and a stand, fixed to a metal basket. The metal basket contains a central fiberglass rod which is covered by a plastic sheath 50 feet (15 m) standart or 60 feet (20 m) with  $\varnothing$  9 mm.



- 1 GRP-rod
- 2 Basket
- 3 Rod protector
- 4 Frame

Figure 1: Viper

### 3. Applications

The Viper with GFK-rod is designed to clean prefab-chimneys and ventilation channels. The rod can be pushed completely into the chimney or the ventilation channel, which is not possible with other methods. It is not necessary to screw short parts of a rod together. Therefore the work will be done much faster. Furthermore the transport and the operation of the compact viper is much easier than done by conventional methods.

Also the cleaning attachments, stars and threaded brushes feature some advantages compared to conventional brushes: The stars (and also the threaded brushes) can be pushed much easier into the chimney than other stars because of the density of bristles, though they clean as effectively as normal stars. The VA flat wire, which is used in case of persistent dirt, has a cutting effect, different from the normal polyamide material.

The possibility to fix three different stars at the end of the GRP rod at the same time, provides great flexibility when choosing the appropriate cleaning attachment for the tube to be cleaned (hardness, density of bristles, material).

### 4. Assambly

Our stars and threaded brushes can be used as cleaning attachments.

**Stars:** The stars have to be fixed at the star holder of the GRP-rod. Below the bottom of the star holder is located a strong spring (figure 4.1, part 1), so that the number of stars can be varied up to three pieces. The stars will be fixed by the screw situated in the upper part of the star holder (figure 4.1, part 2).

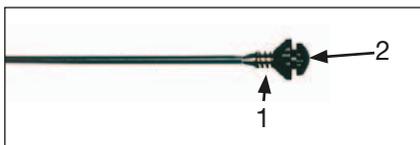


Figure 4.1: Star holder

**Threaded brushes:** For using the GRP rod with a threaded brush you have to twist off the star holder first. After that, simply screw in the GRP rod.

## 5. Guarantee and Service

### 5.1 Guarantee

The guarantee period for the viper is 12 months from the sales date, provided that it is used correctly. This warranty does not extend to wearing parts (GRP -rod).

This warranty does not include the costs for transport and packing material in case of repair. It will expire, if third persons, who are not authorized, repair or change the device.

### 5.2 Service

We see SERVICE as a very important element in our business. That is why we are still available to you even after the guarantee period has expired.

- If you send us the meter, it will be returned to you by our delivery service after repair in just a few days.
- You can obtain immediate help from our engineers by telephone.