



## OekoTube – Electrostatic precipitator for your wood stove

### ESPs



up to 100 kW  
OekoTube



up to 300 kW  
OekoRona



up to 3 MW  
OekoRona M

Wood chips dryer with  
integrated ESP:



up to 10 MW  
Neviro

The electrostatic filter OekoTube substantially reduces particulate matter (PM) from small wood-fired stoves including open fire places, free standing wood- and pellet stoves.

The electrostatic precipitators (ESPs) OekoTube-Outside and OekoTube-Inside are suitable for all wood stoves with a heat output below 100 kW. The OekoTube-Outside is mounted on top of the chimney, the OekoTube-Inside next to the wood stove.

The OekoTubes can also be retrofitted to existing wood heaters.

### OekoTube facts

- Suited for automatic or manual wood heaters
- Certified fine dust removal
- Improvement of the ambient air quality
- Simple cleaning
- Optional: automatic cleaning

### Certified efficiency

0 - 25 kW:	= 70 - 95%
25-50 kW:	= 65 - 90%
50-75 kW:	= 60 - 85%
75-100 kW:	= 50 - 80%

### Certifications

D: DIBT Z-7.4-3451  
CH: AEAI N°. 23273

**Particulate matter.** Particles with a diameter below 10 microns are hazardous to our health. The particles enter the blood vessels via the lungs. The use of an OekoTube actively improves the ambient air quality.

**Installation.** The OekoTube is mounted after the wood heater or at the end of the stack on the roof.

**Operation.** The updraft of the combustion gases is not affected by the operation of the ESP. An electric connection is needed near the place of installation.

The ESP is automatically activated by a temperature sensor. The particulate matter accumulates inside the inner wall of the tube and form larger aggregated flakes.

**Simple cleaning.** During the regular inspection and maintenance, the OekoTube is simple to maintain and clean.

The accumulated dust is easily removed with a conventional chimney brush. The flexible electrode is deflected and does not need to be removed during the maintenance.

**Automatic cleaning.** Depending on the hours of operation and quantity of dust accumulated, the OekoTube needs to be cleaned regularly. The OekoTube is also available with an automatic cleaning mechanism.

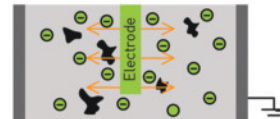
**Operation principle.** The underlying scientific operation of the fine dust filter is based on the electrostatic principle. The following drawings illustrate the working principle schematically.

For further information please visit our website: [www.oekosolve.com](http://www.oekosolve.com)

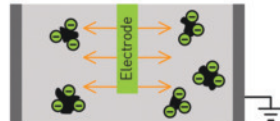
## Operation principle



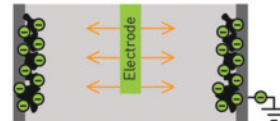
1. PM streams through the smoke stack with the hot exhaust gas.



2. A high-voltage (HV)-electrode releases electrons.

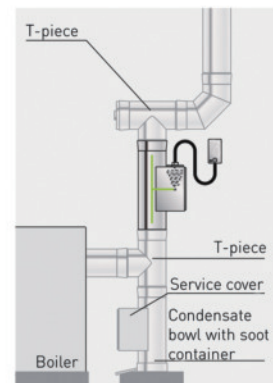
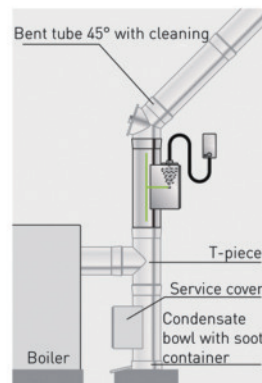
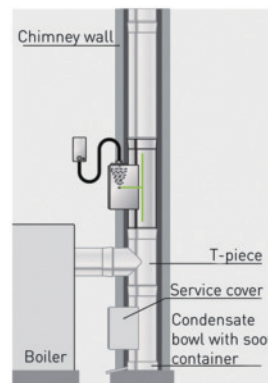


3. The charged particles move to the chimney wall.



4. The PM then accumulates inside the inner wall and can then be easily removed.

## Possible locations for the OekoTube-Inside



## OekoTube-Outside

