

# CTK Abgastechnik & Engineering

info@ctk-abgastechnik.de www.ctk-abgastechnik.de

Telefon 06123-899310 Fax 06123-899311

Ust.-IdNr. DE 812042803 Steuer Nr. 3783330208 Postbank Dortmund BLZ 44010046 Konto-Nr. 0428661460 IBAN DE51 44010046 0428661460 BIC PBNK DE FF

CTK Abgastechnik & Engineering . Scharfensteinstraße 20c . D-65343 Eltville

To whom it may concern

#### FAQ - CTK Mobile Filters

#### 1. What are they for?

CTK Mobile Filters (CMF) are for temporary or permanent abatement of carcinogenic Diesel emissions.

Temporary applications are for example vehicles which need to enter or drive into halls, tunnels or other closed areas with occupational health concerns. The CMF is plugged into the tailpipe when entering and taken off after leaving the facility. Temporary CMF are designed for low speed and torque engine operation. Permanent CMF are for industrial machinery which also need to work indoors. They are firmly attached to the vehicles tailpipe and can be operated at higher speeds and loads.

### 2. How to select the right CMF?

Temporary CMF: there are 3 sizes for truck, LCV and car. They come with several options for plugging-in to the tailpipe. ISV coupling systems fit in the tailpipe and are inflated to make them tight-fit. ASV coupling systems and funnels go around the tailpipe. Coupling systems, funnels and exhaust hoses are temperature resistant to 200 deg C. Hence engine speed and torque should be low. Permanent CMF: we offer 4 sizes for engines up to 25 kW, 50 kW, 100 kW and 200 kW. The kits come with brackets to attach the filter firmly to the vehicle. Further a 1m Flexpipe is supplied to connect the filter to the tailpipe of the vehicle. Filter and

### 3. How long can I run a CMF before it needs regeneration?

Flexpipe are made of stainless steel and resist high temperatures.

This highly depends on the operation and emission status of the engine. Typically the filter inserts can work for 6 - 50 hours before they need regeneration.

### 4. How can I detect whether a filter needs cleaning?

There are 2 options: visual or by back-pressure monitor. If the outlet side of the filter gets grey or black, the filter is saturated and needs a clean.

When an electronic backpressure monitor is fitted, a red LED indicates that a regeneration of the filter element is necessary.





## CTK Abgastechnik & Engineering

info@ctk-abgastechnik.de www.ctk-abgastechnik.de

Telefon 06123-899310 Fax 06123-899311

Ust.-IdNr. DE 812042803 Steuer Nr. 3783330208 Postbank Dortmund BLZ 44010046 Konto-Nr. 0428661460 IBAN DE51 44010046 0428661460 BIC PBNK DE FF

## 5. To which extent can a CMF clean Diesel exhausts?

The CMF curtails carcinogenic soot particles of Diesel engines to a high degree. It does not reduce any odour or fumes. However, with an additional charcoal module, we are also able to reduce Hydrocarbon or CO emissions. Due to the temperature limits of charcoal, this module cannot be used over 100 deg C. For higher temperature applications we recommend usage of a Diesel Oxidation Catalyst.

## Is the CMF emission approved?

The CMF is VERT® approved in Switzerland and hence accepted in most of the countries for occupational health protection.

## 7. How do I regenerate a filter?

The filter consists of a ceramic knit-mesh and is very temperature durable. This enables combustion of the collected soot at a temperature level of 600 deg C. The knit-mesh material is embedded in a stainless steel housing. The complete assembly can be put in an oven. The thermal process takes ca. 6 hours.