



CATALYTIC CONVERTER AIRCAT®



DIESEL PARTICULATE FILTER WITH ADDITIVE REGENERATION CARMEX SC



DIESEL PARTICULATE FILTER WITH INTEGRATED ELECTRICAL REGENERATION CRGE - CRCGE



DIESEL PARTICULATE FILTER WITH FUEL BURNER CRCGO



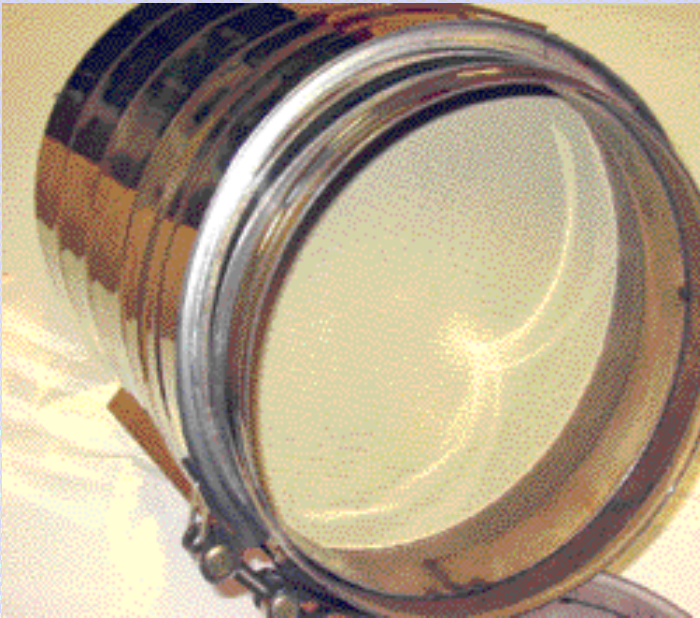
INTERCHANGEABLE DIESEL PARTICULATE FILTER WITH ELECTRICAL REGENERATION REG



CATALYZED DIESEL PARTICULATE FILTER CARMEX - CSC



WATER SCRUBBER AB



Breathe a clean air in your city

DIESEL PARTICULATE CATALYZED FILTER

CARMEX - CSC SYSTEM™

A CLEANER ENVIRONMENT :

Every day, car drivers, pedestrians, bicyclists, are exposed to toxic gases. Who accepts today the sight of Diesel engines emitting clouds of black fumes and particulates.

Recently, studies revealed those clouds to contain ultra-fine particles of about 100 nm (nanometer about 50 times less than a hair). Scientific research results indicates that those particles cannot be stopped in before the lungs and migrate directly towards lungs alveola.

It is urgent to react efficiently to eliminate those fines particles since these lungs alveola constitute an exchange area between air and blood.

THE SOLUTION CARMEX - CSC SYSTEM

Approved system, economical and effective control of particulate emissions.

Objective :

To get rid of black fumes and toxic gases with THE CARMEX-CSC system.

The CARMEX - CSC system eliminates the soot and black fumes emitted by Diesel engines and modify toxic gases into non toxic

Most of the applications for the C A R M E X - CSC system are

- City buses
- Light duty or delivery trucks
- Heavy duty trucks
- City garbage trucks
- Construction machine or forklift

Both on retrofit or OEM market, The C A R M E X - CSC system is improving air quality in cities or local areas.

Technologies :

More stringent emissions regulations are resulting in envolving technology requirements to meet Euro 4 standards or industry requirements.

For example to meet Euro 4 standards, one approach is to tune the engine for low particulates and then use a DeNox technology such as SCR-selective catalyst regeneration to reduce NOx.

The coating technology give benefits to lowered regeneration temperatures, better passive regeneration performance, lower precious metal loadings and better hydrocarbon conversions.

Greater than 95% of TPM (Total Particle Matter), HC (hydrocarbons) and CO (carbon monoxide) in diesel exhaust can be removed. In fact, it is possible to produce an engine that is cleaner in particulates than a natural gas engine.

Installation :

The filter DPF sizing is depending on engine power and maximum exhaust back-pressure.

The CARMEX - CSC system is generally fitted directly instead of the original silencer.

Ultra low sulphur Diesel is recommended (<50 ppm). The CARMEX - CSC system could operate with higher sulphur contents, less than 350ppm, but the catalytic activity is decreased with sul-

How it works ?

Exhaust trap system :

The particulate filter accumulates the soot into the trap during engine running.

The back pressure is increasing at the exhaust. With a classical system, the engine must be periodically stopped and the filter must be regenerated, which disabled the vehicle for a period.

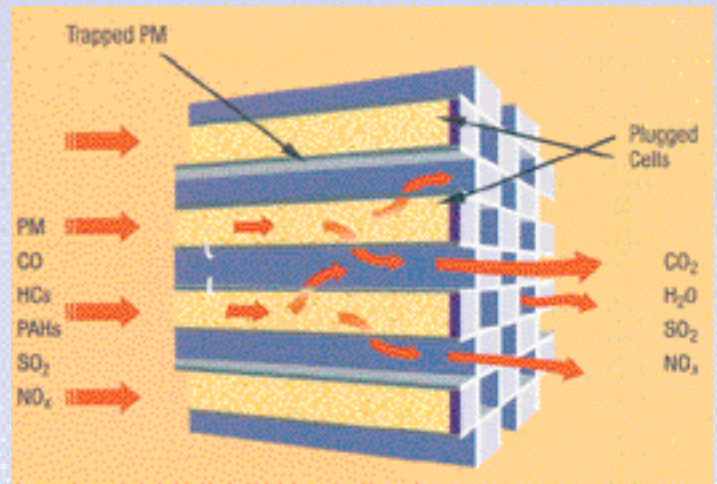
The regeneration temperature is around 300°C - 350°C. As soon as this temperature range is reached, the filter regeneration occurs continuously. Carbon particles are burned out under normal driving conditions.

The coating with precious metal (like Platin,Pt) into the filter allows automatic regeneration by oxydation of the carbon particulates blocked on the trap.

No additive is needed, only low sulphur diesel must be used (50 ppm or less).

The filter have to be cleaned about each 1500 h or 60.000 km to remove accumulated ashes in the trap.

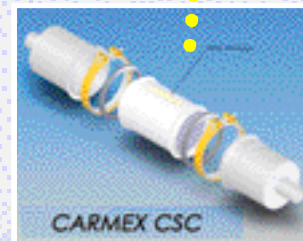
The cleaning process can be realized by the customer by removing the filter element or by a contract with Airmeex for an annual maintenance.



CARMEX CSC APPLICATION



City Buses



CARMEX CSC

CARMEX - CSC SYSTEM ADVANTAGES

- 1- High thermal shock resistant filter with smooth regeneration
- 2- Original silencer replacement
- 3- Lower back pressure
- 4- No additive or extra device for regeneration
- 5- Good thermal resistance
- 6- Easily removable and cleanable

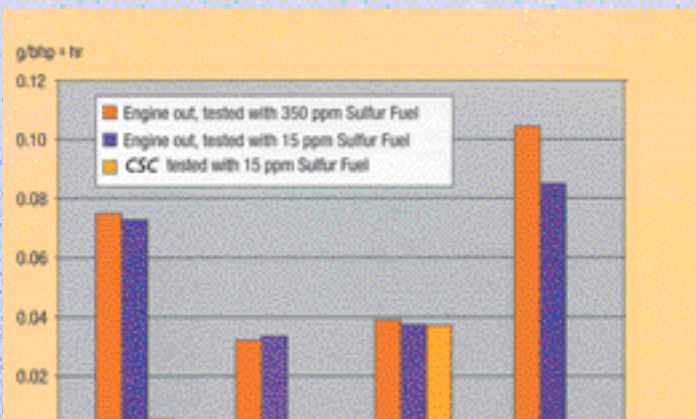
Garbage truck



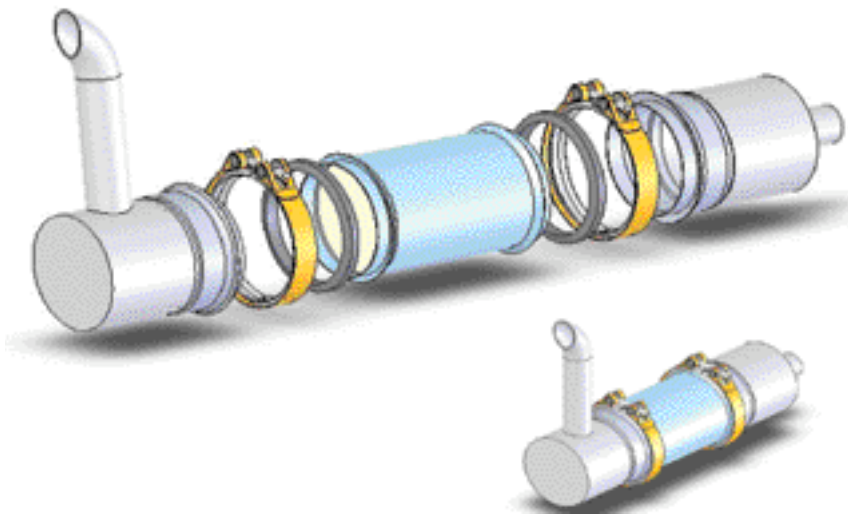
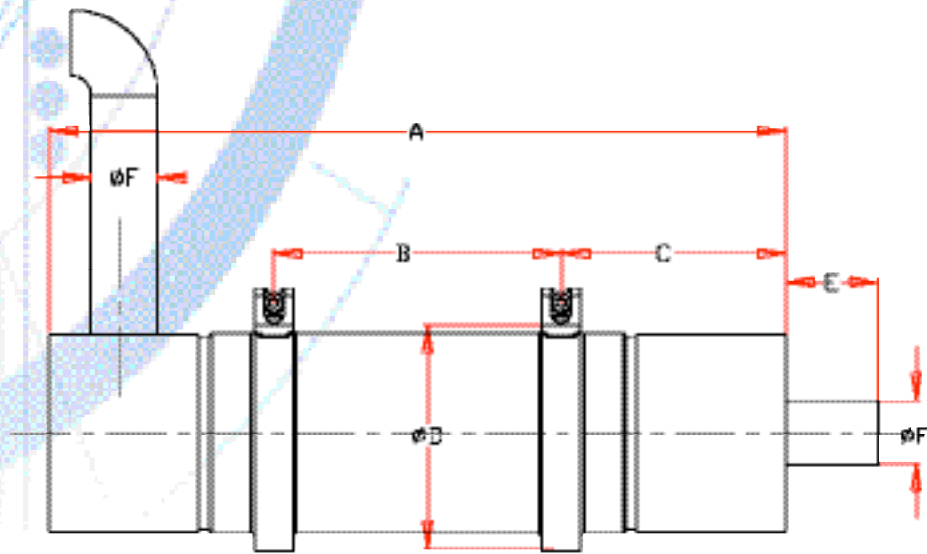
Construction Machine



Trucks



CARMEX CSC FILTER



Airmex Code	Type	Filter Type	P. in Kw	A	B	C	Ø D	E	Ø F
A551093	CSC 1	5.66" x 6.00"	0 - 35.0	380	200	55	164	50	48.30
A551094	CSC 2	7.50" x 8.00"	< 62.50	468	248	55	211	90	88.90
A551095	CSC 3	7.50" x 12.00"	< 95.60	570	350	55	211	90	88.90
A551096	CSC 4	9.00" x 12.00"	< 136.0	580	350	55	249	100	114.3
A551097	CSC 5	9.50" x 12.00"	< 150.0	595	365	55	262	100	114.3
A551098	CSC 6	11.25" x 12.00"	< 213.5	680	450	55	296	100	139.7
A551099	CSC 7	11.25" x 14.00"	< 250.0	780	550	55	296	100	139.7
A551100	CSC 8	12.00" x 13.00"	< 265.0	750	520	55	315	100	139.7
A551101	CSC 9	12.00" x 15.00"	< 305.5	850	620	55	315	100	139.7
A551102	CSC 10	15.00" x 15.00"	< 482.0	1040	772	55	391	150	168.3
A551103	CSC 11	20.00" x 15.00"	< 1155	1160	900	55	518	150	168.3