Retrofit Emission Control Device

Cummins is now introducing RECD!

Compliant to NGT order O.A 681/2018

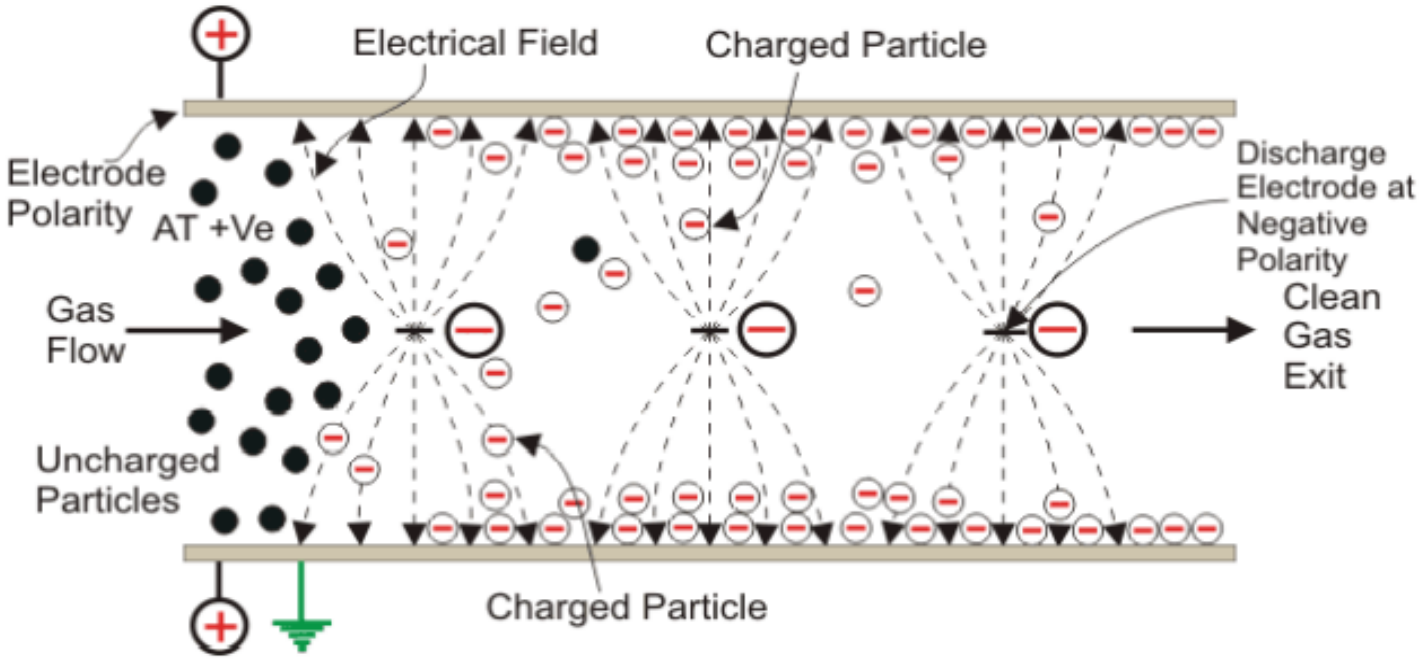
Greater than 70% PM Reduction

No certification applicable for RECDs for > 800 KW Genset

User-friendly design with self-cleaning mechanism

No Manual Cleaning | No Choking | No Replacement | Low Maintenance | No Filter | No Water | No Chemical | No Solvent

Filterless Carbon Cutter Technology



Single Stage ESP Model

How does the Carbon Cutter Work

- The Carbon Cutter is installed after the DG exhaust (muffler/silencer). No modification to the exhaust is required.
- Flue gas enters the Carbon Cutter and is confronted with Corona discharge.
- Due to the contact with high voltage, the surface charge of the PM is nullified and PM gets attracted to electrodes of opposite charge. And the size of the PM increases beyond PM 10.
- The PM agglomerated PM is collected in powder form and is available for reuse.

Technology Advantages

Technology	PM Capture Efficiency	Initial Cost	Operational Cost	Prominent Failure Mode	Impact on Engine	Ease of maintenance	Robustness to exhaust challenges
Diesel Oxidation Catalyst (DOC)	20-40%	Low	Negligible	Face Plugging	Negligible	Not serviceable	No
DOC + Partial flow Filters or Partial Oxidation Catalyst (PFF/POC)	60-75%	Moderate to High	Moderate (fuel penalty due to back pressure)	Soot load & thermal event	Variable back pressure (>25 kPa)	Not serviceable	No
DOC + Diesel Particulate Filter (DPF)	>90%	High	High (fuel penalty due to back pressure)	Soot load & thermal event	Variable back pressure (>35 kPa)	Ash cleaning Soot removal	No
Water/ Solvent Based Exhaust scrubbers Solution	NA	High	Moderate to High (wash fluid and chemical replenishment)	Fouling and engine hydro-lock	Back pressure due to HE	Complex and frequent service	Probably Yes
Carbon Cutter Machine	80%-90%	Moderate	Negligible	None	Negligible & control parameter	Easy service	Yes

Product Benefits

- *Energy efficient as requires no active regeneration. No dependency on exhaust temperature.*
- *Robustness to wide variety and condition of in-use DG sets. Remote installation possible*
- *Unmatched and minimal flow restriction compared to conventional technologies.*
- *No additional fuel consumption penalty.*
- *Simple, efficient and Robust design that gives consistent performance and long operational life.*
- *No secondary emissions, face plugging, hydrothermal aging or substrate/filter damage risk.*

Product Portfolio

RECD Products for >800 kW

Product Nodes

1010 KVA	1250 KVA	1500 KVA	1750 KVA	2000 KVA

Approximate Dimensions & Weight

2.3 M (L), 2.6 M (W), 3.1 M (H) / 3.6 Tons

Approximate Energy Consumption

In-use Power 2.1 kW / Stand-by power <10 W

Installation Photographs

Customers using this Technology

Hero

Brakes India Private Limited

SAINT-GOBAIN

YAMAHA
Revs Your Heart

PSA
GROUPE

CavinKare
Making Lives Happier

KANSAI NEROLAC
PAINTS LIMITED

TVS

ITC HOTELS
RESPONSIBLE LUXURY

CUMI

murugappa

Carborundum Universal Limited

DAIMLER

BOSCH

TITAN
COMPANY

adani
Ports and Logistics

TENNECO


Thank You!