

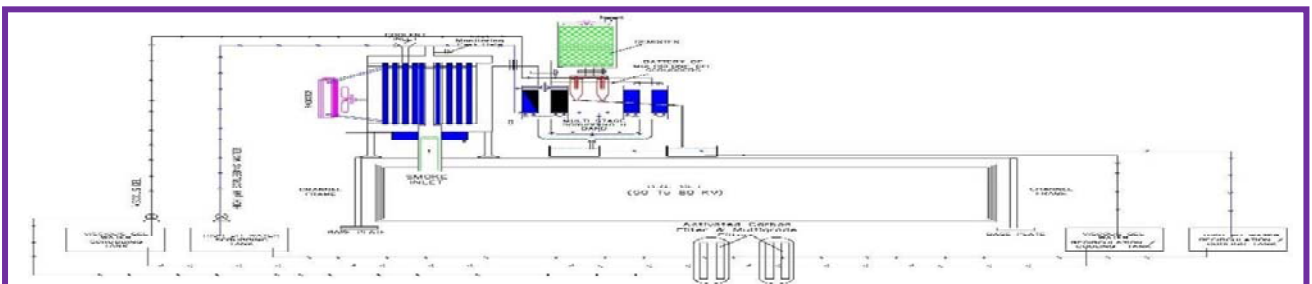
Design of Wet Scrubber Based Retrofit Emission Control Device (RECD) For Diesel Generator Sets

Technology in Brief

In a wet scrubber, particulates are disposed off in two steps: firstly particles are wetted by drop of liquids. Secondly, these particles are separated from the hot stream by simple inertial means. This results in separation efficiency more than 90 %. Thus exhaust gas stream after treatment free from GHG gases and pollutants is discharged in to atmosphere through stack. Thus a healthy and comfortable environment can be maintained.

Salient Features/Advantages

- Volatile matter, hydrocarbons, SO₂, NO_x, CO, CO₂ and other greenhouse gases are not eliminated in the environment.
- Eco-friendly solution-as PM 2.5 & PM 10 can be trapped which results in cardiovascular diseases.
- Lower capital and operating cost than other dry processes.
- High efficiency for acidic gases and particulate removal (90-99%).
- Low solid waste removal requirements.
- Design flexibility to meet future emission standards.
- No modification on the engine design or any critical engine parameter.
- No negative impact on the durability and efficiency of the engine.
- Low back pressure
- Low maintenance and long life
- Disposal of collected effluent with tars is easy and eco-friendly disposal/utilization



End Product(s)	Design of wet scrubber based retrofit emission control device (RECD) for diesel generator sets
License/Commercialization	1)M/s. UPCHARGE Energy Solutions, Delhi
TRL	7
Environmental Impact	Low carbon foot print
Setup-Equipment required	<ul style="list-style-type: none"> • Heat exchanger equipped with radiator • U-bend Multi State Scrubbing • Multiclone gel Scrubber • Activated carbon filter and two stage RO • Demister equipped ID Fan • Exhaust fan • HDPE/PPR Piping network