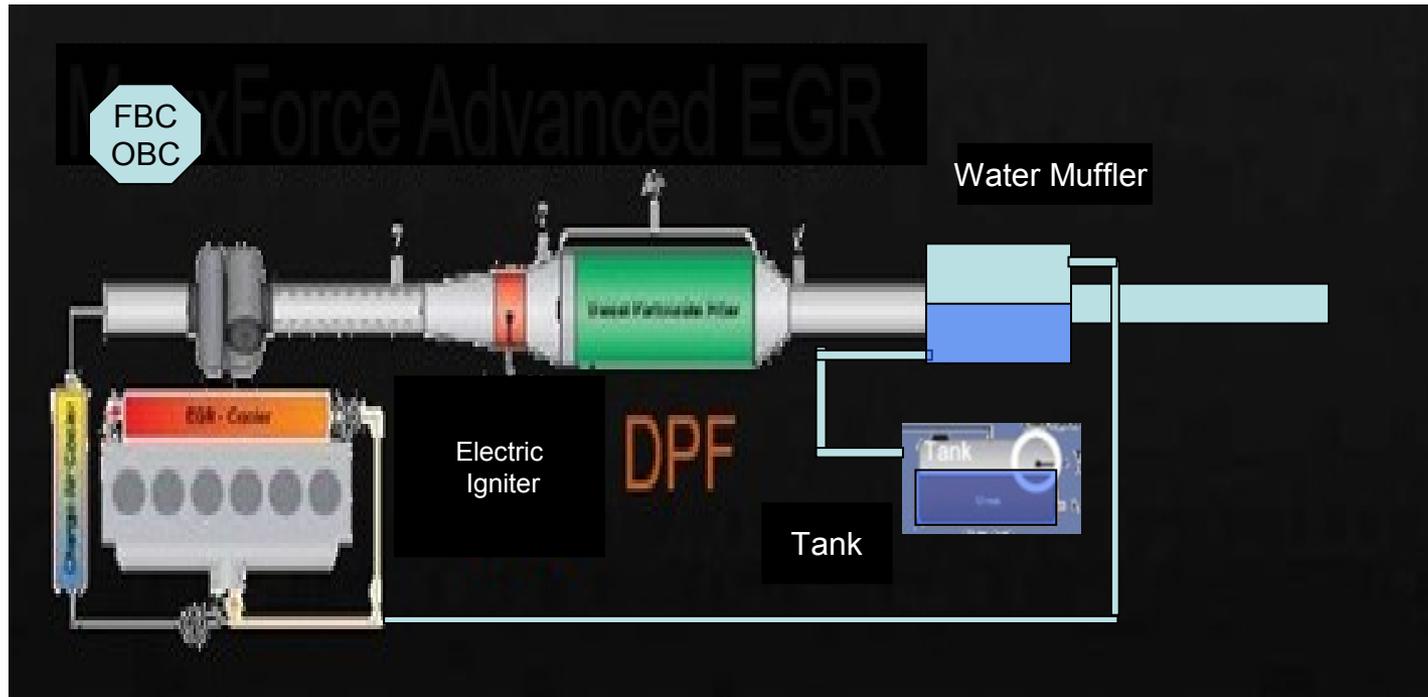


GreenPower™ Trap Water-Muffler System:

Rim's U.S. Patent Numbers: 1) 7,530,349; 2) 6,892,531 & 3) 5,085,049
(GreenPower™ trademark registered in the USA)

Features of GreenPower™ NOx-PM Reduction & Fuel Saving (Award-Winning).

- Uses a low-cost catalyst in engine oil and fuel (High-cost PMG catalysts not used).
- Adds just Water into GreenPower™ “Water-Muffler”. (Urea-SCR not used)
- Recovers Waste heat from hot Mufflers.& Increases Combustion Efficiency further with H2 reformed from steam (H2O), while reducing NOx formation.



GreenPower™ “Water-Muffler” or Hydrated-EGR system has 2 substantial benefits – NOx reduction and Enhancing fuel efficiency. DPF is catalyzed by Fuel Borne Catalyst, generated by the patented Oil Borne Catalyst (OBC) system.

1

NOx-PM REDUCTION

By introducing water vapor into the combustion chamber, combustion temperatures are reduced, thus reducing the formation of NOx, and increasing fuel efficiency. PM is reduced by DPF catalyzed by FBC & OBC.

MECHANISM

2

FUEL EFFICIENCY + + +

- 1) By Thermal effect. Muffler-Waste heat makes steam.
- 2) By Chemical effect of steam on to H₂, which is generated by a steam-fuel reforming reaction, “endothermic reaction.”

PROPOSED RESULTS

- NOx reduction by 50-80%
- PM reduction by 85%+
- Add plain water (not Urea)
- Low cost catalyst (not PMG)
- Extend Engine-life
- Reduce waste oil disposal
- 10 -15% increase in fuel efficiency by water addition
- The Port of Los Angeles will support to demonstrate on a huge diesel engine for Vessel.