Methane Slip Catalyst - MSC





Prepare for decarbonization



The CatEMission Methane Slip Catalyst System is an innovative solution designed to address methane slippage, a potent greenhouse gas, from gasoline / dual-fuel engines. Leveraging catalyst oxidation technology, this system is instrumental in significantly reducing methane emissions in marine and industrial applications.



KEY BENEFITS

1.

High Efficiency Methane Reduction: Capable of reducing methane emission levels by up to 95%, ensuring a significant decrease in environmental impact.

2.

Advanced Oxidation Technology: incorporates platinum group metal (PGM) oxidation catalyst substrates to achieve a high rate of methane oxidation within operating temperatures of 350°C to 500°C.

MARKET SEGMENTS

MARINE: Designed for application on large marine and cargo vessels, this system helps to comply with strict environmental regulations while sailing around the world.

INDUSTRIAL: Suitable for compact power generation and biogas treatment facilities, ensuring methane emissions are controlled even in the most demanding industrial environments.

COMPLIANCE

The system is designed to meet and exceed legal regulations on methane emissions, providing an environmentally friendly solution for CH4-containing exhaust gases and eliminating NOx emissions.

R+D PILOT SLIDE CATALYST ON A CRUISE SHIP

Objective

 Evaluate the CH4/HC/CO reduction efficiency trend to confirm laboratory results.

PROTOCOL

- Operation only during the burning of LNG fuel
- Continuous monitoring of CH4/ HC/CO
- Significant data anticipated after 600 hours

MONITORED PARAMETERS

- Total Uptime
- Reactor temperatures and pressure
- CH4/HC/CO concentration
- Exhaust gas flow

TEST PARAMETERS

- Catalyst cell density 200-300-400 CPSI
- Various PGM formulations and wash
- Temperature 350° to 450°