## **Methane Slip Reduction**

## Description

The Ecospray Methane Slip Reduction system uses **catalytic oxidation technology to remove methane slip** from 4 stroke LNG and dual fuel engines, and can be applied to vessels and superyachts.

Since Methane has a much higher global warming potential compared to  $CO_{2'}$  our Methane Slip Reduction system is designed to reduce emission levels up to 95%, using oxidation catalyst substrates with PGM (Platinum Group Metal) to oxidize methane.

Within its operating temperatures, ranging from 380°C to 550°C, it reaches **high efficiency values up to 95%**, according to the exhaust temperature.



## **Technical Information**

## **Features**

- > PGM formulated to maximize efficiency at engine operating conditions (400-450°C).
- > Washcoat formulated to resist moisture present in the exhaust gas.
- > Possibility to provide a 100% sealed bypass (as in dual fuel engines, sulphur in diesel fuel is a pollutant that drastically reduces catalyst life).
- > Metal substrate catalyst: high resistance to thermal and mechanical stress, exceptional vibration durability, and minimal pressure drop.
- Recycling: catalyst disposal and precious metals recovery (PGM) service to optimize costs and efficiency.

Power	Flow @85% Load	Arragement catalyst			Total number catalyst	Total volume catalyst	Space velocity	Reactor size	Efficiency 85% Load @400°C		Efficiency 50% Load @400°C	Efficiency 50% Load @450°C
(MW)	(Nm³/h)	(-) Layer	(-) No. W	(-) No. H	(-)	(m³)	(1/h)	(mm x mm)	(%)	(%)	(%)	(%)
2	9.375	3	2	2	12	0,23	41.287	1.100x1.100	43,8	74,3	49,9	80,4
4	18.750	3	3	3	27	0,51	36.699	1.550x1.550	46,1	76,6	51,5	82,0
6	28.125	3	4	3	36	0,68	41.287	2.000x1.550	43,8	74,3	49,9	80,4
8	37.500	3	4	4	48	0,91	41.287	2.000x2.000	43,8	74,3	49,9	80,4
10	46.875	3	5	4	60	1,14	41.287	2.450x2.000	43,8	74,3	49,9	80,4
12	56.250	3	6	4	72	1,36	41.287	2.900x2.000	43,8	74,3	49,9	80,4
14	65.625	3	6	5	90	1,70	38.534	2.900x2.450	45,2	75,7	50,9	81,4
16	75.000	3	7	5	105	1,99	37.748	3.350x2.450	45,6	76,1	51,2	81,7
18	84.375	3	6	6	108	2,04	41.287	2.900x2.900	43,8	74,3	49,9	80,4