

## IMR 2000 MARINE EMISSION MEASUREMENT

*O<sub>2</sub>, CO, NO, NO<sub>2</sub> and CO<sub>2</sub> -  
measurement  
all in one case*



**TYPE APPROVED BY DNV-GL**

**The compact IMR 2000 Marine, with integrated gas conditioning system, is the ideal flue gas analysis system for marine applications.**

- ⇒ emission analysis
- ⇒ combustion optimizing
- ⇒ environmental analysis
- ⇒ engine modification

### **Application and Solution for emission measurements on board:**

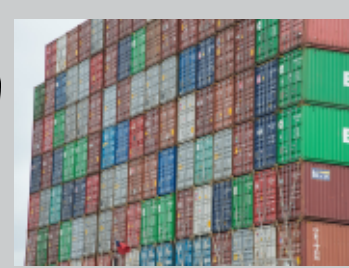
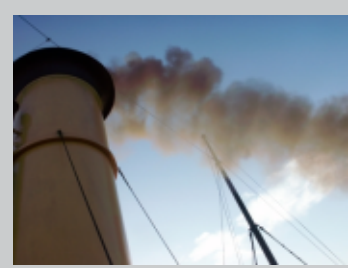
It cannot be assumed that an engine, over its entire life span, can be operated within the emission value, which was measured on the engine manufacturer test bed. The wear and tear and the changing of operating parameters will definitely lead to a change of emission values and efficiency.

The IMR 2000 Marine has been designed to easily and efficiently measure these values to ensure your emissions are kept to acceptable levels. The system guarantees high accurate measurements without losing the mobility advantage of a portable system. An extensive range of various flue gas probes complete this unique system. IMR® flue gas analysers are used worldwide and comply with current German environmental regulations and many national standards.

### **Performance data:**

- ⇒ All measurement- and calculated values shown on the display  
O<sub>2</sub>, CO, NO, NO<sub>2</sub> und CO<sub>2</sub>
- ⇒ other optional available measurements: SO<sub>2</sub>, H<sub>2</sub>S, CH<sub>4</sub>, H<sub>2</sub>
- ⇒ All measurement- and calculated values shown on the display
- ⇒ integrated thermo printer
- ⇒ all in one case
- ⇒ simple operation
- ⇒ RS232 interface for online transmission of measurement data
- ⇒ integrated gas conditioning system
- ⇒ Guaranteed high accuracy
- ⇒ fuels with standard parameters are pre-programmed
- ⇒ fuel settings can be easily changed
- ⇒ type approved by GL-DNV acc. to MARPOL Annex VI
- ⇒ Made in Germany

**Your reliable partner for marine measuring instruments and service**

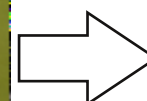
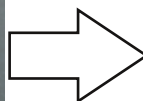
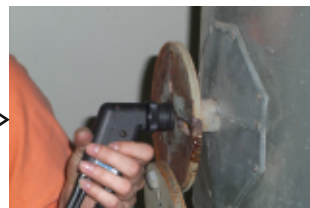
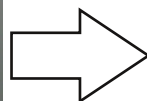


## IMR 2000 MARINE EMISSION MEASUREMENT

### Technical data

Display:	illuminated 4 line display, display of all parameters simultaneously in ppm, mg or mg (O <sub>2</sub> ) ref
Accumulator:	rechargeable lead acid battery, guarantee 6 hours of independence from main power
Gas conditioning:	integrated in the case, Peltier controlled heat exchanger, Gas volume 120 l/h, outlet dew point 5°C, maintenance free
Zero calibration:	Automatic zero calibration with ambient air on every start of the system (3min)
Case:	Built in a robust, protective case, rollable, IP 67 (in the closed case)
Measure method:	electrochemical sensor, infrared sensor
Consistency:	+/- 1% of full range
Linearity:	+/- 1%
Protocol:	Printout with date and time. Automatic interval can be programmed (1-99min)
Interface:	RS 232 C
Probe tubing:	Standard length ca. 3,5m. Extensions are available.
Storage temperature:	-20°C - 50°C
Operating temperature:	+5°C - 40°C
Weight:	ca. 20kg
Power supply:	230V/50 Hz mains power supply, 12V from the built - battery

### Emission measurement quick, easy & reliable!



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*****
* MARINE *
*****
14.01.2015 15:02:43
I N R (R)
Robert-Mayer-Str. 12
D-74172 Heckschulte
Tel.: 07131-3646-0
-----
#model
M1 -> M02
-----
T-room 24°C
T-sua 32°C
CO2 0.1%
CO 28.1%
SO2 0ppm
NO2 0ppm
NO 0ppm
ETA ----%
LAWSON ----

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