

## ScrubberGuard

# Measuring system for Scrubber wash water monitoring











#### **Applications**

Monitoring wash water of exhaust gas cleaning systems

#### **Industries**

Shipping industry

#### **Advantages**

- True non-contact free-fall measurement of turbidity and PAH (polycyclic aromatic hydrocarbons) guarantees consistent true measurement values
- Calibration with secondary standard possible at any time
- · Low maintenance
- Compact and certified all-in-one system
- Central, integrated control unit with colour touchscreen
- Display of values and / or graphs with visualization of the measured data covering the past 32 days.

### ScrubberGuard

Measuring system for Scrubber wash water monitoring

#### Innovations with tanigble benefits



#### No window fouling as a result of the non-contact free-fall measurement

The AguaScat and the OilGuard measure turbidity or the PAH-content, respectively, in a free-fall water stream. There is no contact between the water and the optics.

- · No reading falsifications as a result of window fouling
- The true measurements are always guaranteed
- Low maintenance



#### Re-calibration with secondary standard

At SIGRIST, the AquaScat is calibrated with formazine, the OilGuard with phenanthrene. For a recalibration at customer site, a secondary standard (solid) is delivered with each instrument.

- · Exact re-calibration without formazine/ phenanthrene
- No chemicals necessary
- Low total cost of ownership



#### Compact all-in-one system

- Simple installation by fixing the rack on the floor, connecting power and in- and outlet for the sample
- Multitude of communication options

#### Modular design

• For a simple integration and adaptation to individual operation conditions

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#### Integrated control unit

The instrument is operated via a touch screen with colour display.

- Values, graphs, states or alarms can be displayed, as selected
- · An internal data logger allows the visualisation of the measured data covering the past 32 days
- Extensive communication options incl. integrated web server

#### Technical data

#### ScrubberGuard System

Dimensions:

Sample temperature: Sample flow: Max. pressure:

Max. ambient temperature: Ambient humidity:

Protection index:

Power supply: Power consumption:

650 W (1050 W incl. inlet pump) Reliable measurement up to 20° List: measurement possible up to 30°

316L

NBR

(h/w/d)

+50 °€ 0 ... 100% rel.h.

IP 54

0 ... +50°C

min. 5 l/min

0.3 Mpa (3 bar)

approx 1280x880x400 mm

220V/60 Hz, 230V/50 Hz

316L, PVC-U (+GF+), FKM, NBR

316L; Viton® and PPE

(all axes) approx. 100 kg

Weight: Materials

Structure: In contact with medium:

Pumphead: Impeller:

Operation and interfaces

Display: Operation: Inputs:

1 x digital input for Remote

Control

1/4 VGA, 3.5"

Touchscreen

Digital interfaces: Ethernet, Modbus TCP, microSD

card

Optional: Profibus DP, Modbus RTU, HART, Profinet IO, USB Memory

4 x 0/4 ... 20 mA 4 x digital outputs 2 x relays freely configurable

Connection dimensions

Outputs (optional):

0.25-4 mm<sup>2</sup>, AWG 22-12 Electr. conn. dim.: Hydr. connection:

Turbidity measurement

90° scattered light acc. to stan-Measuring principle:

dard ISO7027/EN27027

FNU

Measuring range: 0 ... 1000 FNU

Oil-in-water measurement

Measuring principle: UV fluorescence acc. to

MEPC.259(68) and MEPC.340(77) Phenanthrene equivalent

Measuring range: 0-1000 μg/l phenanthrene

equivalent

pH/temperature sensor

Measuring principle pH: Measuring range pH: Meas. principle temperature: Unit temperature: Meas. range temperature:

Glas electrode 0-14 pH NTC 22 kΩ °C, K, °F 0 - 130 °C



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