KEEP THE SUN DECK CLEAN!
The only oil on the sun deck in this picture should be sun tan oil. Unfortunately, this is not always the case. It has happened more than once that oil mist, oil droplets from the crankcase ventilation pipe, has spoilt a cruise holiday.

Having to refund unhappy passengers — not to mention the blot on your (green) image — is not good for business. More stringent environmental legislation regarding crankcase ventilation is also likely to be imposed in the near future, so why not deal with the potential problem now and install the only solution that effectively eliminates the oil mist?

WORKING PRINCIPLE
The Oil Mist Separator removes more than 98% of the oil mist in the crankcase ventilation gas. The system is safe and easy-to-install and enables cruise and passenger vessels to avoid problems with oil mist. The oil mist looks like smoke because the droplets are very small in size, between 0.1 and 2 µm, which is why till now it has been difficult to remove them effectively.

The key component in the module is an electrically driven separator. Engine crankcase ventilation gas is fed to the separator where the oil particles are centrifuged and collected in a small container. The oil is then fed back via a drain pipe to the engine. A frequency converter boosts the speed of the electric motor to improve separation efficiency. The separator unit is regulated by a throttle valve on its inlet pipe to match the gas flow from the engine or engines.

INSTALLATION
The flexible mounted separator, the throttle valves and a safety switch are mounted on a steel frame module. Since the processed gas may be explosive, all components inside the separator are made of spark-proof material.

Regardless of engine type, the installation is a straightforward procedure and there is no impact on the crankcase pressure.
**Performance**

- **Capacity:** Up to 400 m³N/h per unit
- **Inlet gas temperature:** 20°C - 80°C
- **Cleaning efficiency:**
  - abt. 98% at a flow rate of 150 m³N/h (20V34SG)
  - 95% at a flow rate of 210 m³N/h (9L46)
  - 93% at a flow rate of 322 m³N/h (12V46)
  - 83% at a flow rate of 420 m³N/h (18V46)

**Standards and protection classes**

- **Safety standard:** EN 292, Safety of machinery
- **Piping standard:** EN 13480
- **Enclosure class:** IP54 + drip water safe

**Emissions**

- **Heat dissipation:** About 2 kW
- **Noise:** Max. 80 dB(A)
- **Vibration:** Less than 28 mm/s (RMS)

**Site requirements**

- **Space requirements:** About 2 m total height (i.e. about 0.8 m service space above the module)
- **Flatness tolerance:** 10 mm
- **Humidity:** Must not be exposed to water
- **Temperature:** Separator: 0°C – 65°C
  
**Electrical system**

- **Operating voltage:** Three phase 380 - 480 VAC
- **Frequency:** 50 or 60 Hz
- **Power consumption:** Max. 1.5 kW
- **Frequency converter:** ABB ACS 140 2.2 kW
- **Cabling:** 4 wires, L₁, L₂, L₃, PE

**Separator**

- **Power:** 1.5 kW electric motor with heavy duty bearing and bearing housing
- **Speed:** 7200 rpm
- **Number of discs:** 185
- **Housing:** Aluminum casting

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