

## Press Release

Höhr-Grenzhausen, Dec 9, 2019

## Steuler Anlagenbau designs waste water and waste-free flue gas treatment plant for seagoing vessels

News appear almost daily concerning the topic "Environmental pollution through seagoing vessels". Precisely, this involves concentrated emissions of soot, sulphur oxide and nitrogen oxide from large engines driven by heavy oil, which is with every other drive technology, a thing of the past.

To reduce this emission, one could switch to low-sulphur diesel, LNG or LPG but the problem of nitrogen oxide emissions and soot (with diesel) remain. In addition, substantially higher costs for the fuel and retrofitting arises.

An alternative to this are flue gas treatment plants. The methods used till now (only wet scrubber or scrubber) however produce waste water and waste materials. The drained waste water contains salts which additionally pollute the environment. Furthermore, such wet scrubbers produces an intensive white waste gas plume, resulting from noxious sulphuric acid aerosols, as these can only partially be removed from the flue gas by the scrubbers.

To eliminate this problem, Steuler Anlagenbau has developed a modular flue gas treatment process, by which

- No waste water and waste materials arise,
- No widely visible vapour plume appears,
- The specified emissions are securely maintained. \_

And these at low operating costs, so that the process is quickly pays off compared to a conversion to ecological fuel.

The system developed by Steuler removes the pollutants from the waste gas flow with the aid of chemical and physical processes and converts them in several steps – as already known in large plants on land - to water, nitrogen and gypsum. Water and nitrogen are natural components of ambient air. The gypsum can be used in the building industry problem-free and without health risks. We have succeeded in designing such a plant - based on the plants on land which have proven over several years - so compact that it can be installed on ships.

This module cold be installed and operated in combination or as a single module.

This system is therefore waste water and waste material free and also much more economical compared to other alternatives.



The Steuler Group operates worldwide with a portfolio of leading brands and innovative technologies in Equipment Engineering/ Environmental Technology, Linings and Tiles. Founded in 1908, the medium-sized company now has over 2,800 employees at more than 25 international locations.

www.steuler-anlagenbau.de



A flue gas treatment plant on a seagoing vessel is not small, but can easily be accommodated in a spacious hull.

## **Publication of photos:**

Free-of-charge publication of the photo with the mention "Photo: Steuler".

## Press contact:

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