

## About Mourik

Infrastructure

Industrial Services

Catalyst Handling

Industrial and Commercial Construction

Environmental Technology

Project Development

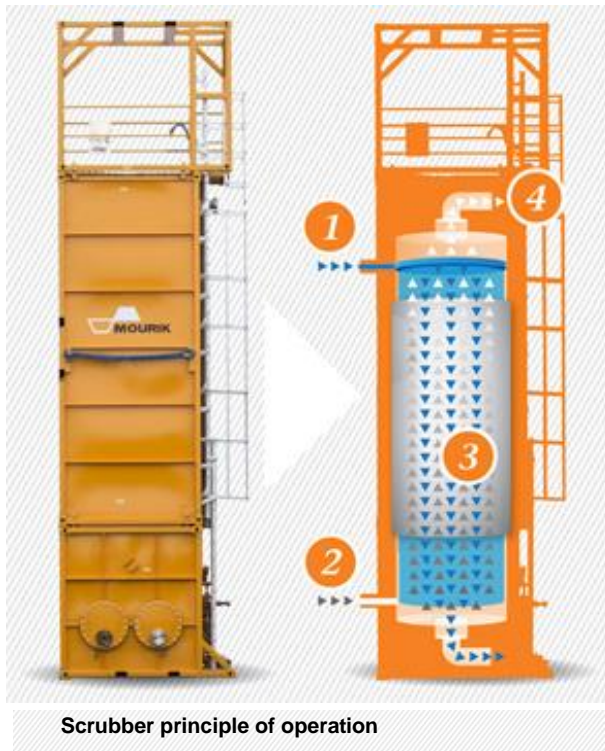


## Scrubbers / Gas Washing Installations



*'Mourik provides a wide range of technologies for exhaust gas treatment'*

Industrial exhaust streams are a common phenomenon during maintenance and cleaning activities. Increasingly stringent laws, rules and regulations no longer allow uncontrolled gaseous emissions. Mourik provides a wide range of technologies for such treating polluted exhaust streams. One of the technologies Mourik has used since many years now is gas washing by means of scrubbers.



Scrubber principle of operation

### How does it work?

In the scrubber, the polluted exhaust stream is brought into contact intensively with the selected scrubbing solution in a packed bed consisting of pall rings. The concentration difference between the polluted air and the scrubbing solution causes the pollution to transform from gas phase to water phase.

### Explanation of the scrubbing process

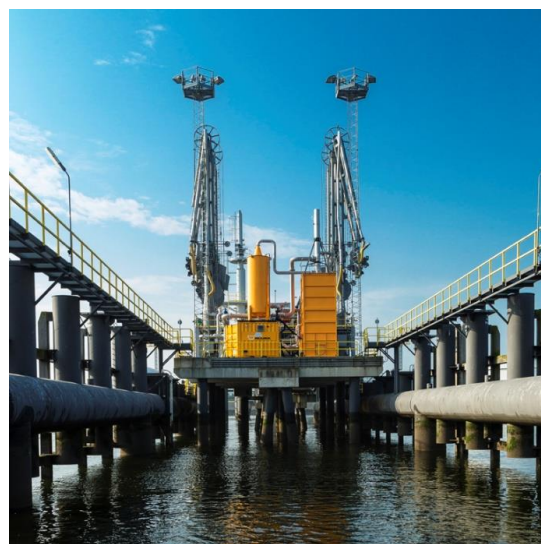
1. Washing fluid buffer: the quality of the washing fluid is continuously monitored. The contaminants extracted in the scrubbers are chemically converted into water soluble salts.
2. The contaminated off-gas is fed into the scrubber.
3. Scrubber package: the contaminated off-gas is brought into close contact with the washing fluid in the scrubber package, causing the contaminants to pass from the air phase to the water phase.
4. Emission of the decontaminated off-gas into the ambient air.



Permanent scrubber installation for removal of hydrocarbons, mercaptans and H<sub>2</sub>S



Scrubber on platform trailer for treating vacuum truck offgases



Permanent scrubber installation for waste gas during ship loading.

## Examples of treated waste gas flows:

- Sulfur dihydrogen (H<sub>2</sub>S)
- Ammonia
- Waste gas storage and transshipment of oil products
- Waste gas from slaughterhouses
- Epichlorohydrin
- Phenols
- Acrylonitrile

## Temporary Installations

Mourik has a wide variety of mobile scrubbers with a capacity ranging from 500 to 15,000 Nm<sup>3</sup>/h, with or without self-suction equipment. Because most of the treated gases are explosive types, Mourik also provides scrubbers that meet the ATEX requirements.

## Results

The scrubbers reach extremely high pollutant removal performances with hydrogen sulfide (H<sub>2</sub>S), mercaptans and ammonia. In addition, considerable reductions are being achieved with hydrocarbons.

## 'High pollutant removal performances'

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