

# Sulfurex<sup>®</sup>CR

## Chemical Re-use Gas desulphurisation

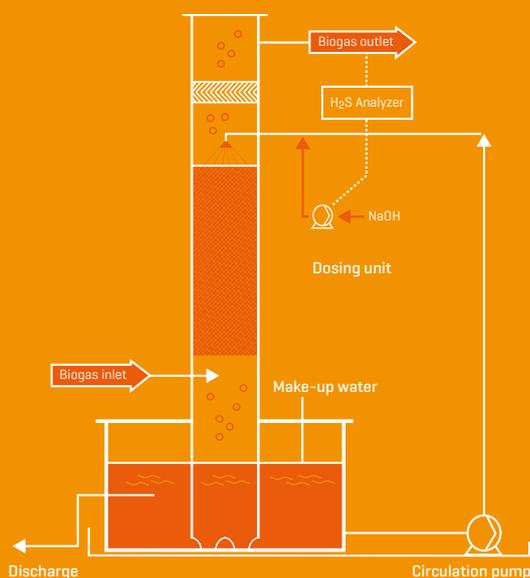
The most reliable way  
for desulphurisation

### Why use Sulfurex<sup>®</sup>CR?

- Full control over H<sub>2</sub>S outlet
- Complete flow and concentration flexibility
- Compact unit

### How does it work?

The Sulfurex<sup>®</sup>CR technology operates as a counter-current scrubber to insure the intense contact between (bio)gas and caustic solution in order to reach maximum removal efficiency. During this process H<sub>2</sub>S gas is absorbed by the caustic solution and converted into NaHS. Continuously H<sub>2</sub>S-measurement controls the caustic input to ensure high efficiency and fast reaction to fluctuations in inlet gas. Selective desulphurization is enabled through measuring and control of the gas speed, chemical concentrations, pH values, temperature and pressure at which the gas is desulphurised. By controlling the physical and chemical processes in a smart way we are able to minimize caustic consumption.



## Selection table

Sulfurex <sup>®</sup> <sub>CR</sub>		Flow (Nm <sup>3</sup> /h)				
		100	250	500	1000	2500
Model	Single stage	CR1-100	CR1-250	CR1-500	CR1-1000	CR1-2500
	Double stage	CR2-100	CR2-250	CR2-500	CR2-1000	CR2-2500
	Chilled	CR2/C-100	CR2/C-250	CR2/C-500	CR2/C-1000	CR2/C-2500

*Higher flows and concentrations on request.*

### Caustic desulphurisation explained

In the scrubber both H<sub>2</sub>S and CO<sub>2</sub> are absorbed by the caustic solution. The selectivity of the Sulfurex<sup>®</sup>CR process ensures that minimum amounts of CO<sub>2</sub> are absorbed.

A second scrubber can be added to minimize the use of caustic. The discharge from the first scrubber is re-used to remove the bulk of the inlet H<sub>2</sub>S.

### Cooling and drying of biogas

DMT has developed a new technology where desulphurisation is integrated with cooling and drying in one system. The absorption of H<sub>2</sub>S is more efficient at low temperatures, resulting in a further caustic reduction. In addition, dried biogas prevents condensation and mechanical problems in CHP engines.



#### First scrubber



#### Second scrubber



### Optional features

- Gas drying and conditioning
- Full (bio) gas analysis
- Caustic preparation
- Water softener



**Our challenge**  
**To create a clear**  
**and prosperous future**

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**DMT Environmental Technology**

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