Chemical gas desulphurisation

The most reliable way for desulphurisation

Why use Sulfurex® CR?
- Full control over H₂S outlet
- Complete flow and concentration flexibility
- Compact unit

How does it work?
The Sulfurex® 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 H₂S gas is absorbed by the caustic solution and converted into NaHS. Continuously H₂S-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

<table>
<thead>
<tr>
<th>Sulfurex®</th>
<th>Flow (SCFM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Model</td>
<td></td>
</tr>
<tr>
<td>Single stage</td>
<td>CR1-50</td>
</tr>
<tr>
<td>Double stage</td>
<td>CR2-50</td>
</tr>
<tr>
<td>Chilled</td>
<td>CR/C-50</td>
</tr>
</tbody>
</table>

Caustic desulphurisation explained
In the scrubber both H₂S and CO₂ are absorbed by the caustic solution. The selectivity of the Sulfurex®CR process ensures that minimum amounts of CO₂ 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 H₂S.

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 H₂S is more efficient at low temperatures, resulting in a further caustic reduction. In addition, dried biogas prevents condensation and mechanical problems in CHP engines.

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

Our challenge
To create a clear and prosperous future

DMT Clear Gas Solutions
19125 SW 125th CT, Tualatin, OR 97062, United States of America
+1 503 379 0147, info@dmt-cgs.com www.dmt-cgs.com