MV TECHNOLOGIES

Transforming H_2S Solutions

Combine Dry and Biological Scrubbing for Maximum H_2S Control

Introducing the MV **BioH2SPlus**™ Hybrid System

Designed specifically for biogas applications where the inlet H_2S concentration is very high and the outlet concentration limit is very low – the MV **BioH2SPlus** Hybrid System removes large volumes of H_2S cost-effectively, efficiently and consistently. It's guaranteed to deliver outlet levels of 20ppm or less.

MV Technologies has engineered a patent pending hybrid system that integrates the benefits of biological and dry scrubber technologies. We employ biological scrubber technology engineered to reduce dry scrubber media consumption while our **H2SPlus** system delivers the sustained, constant low-level H_2S outlet concentrations required by emission control regulations.

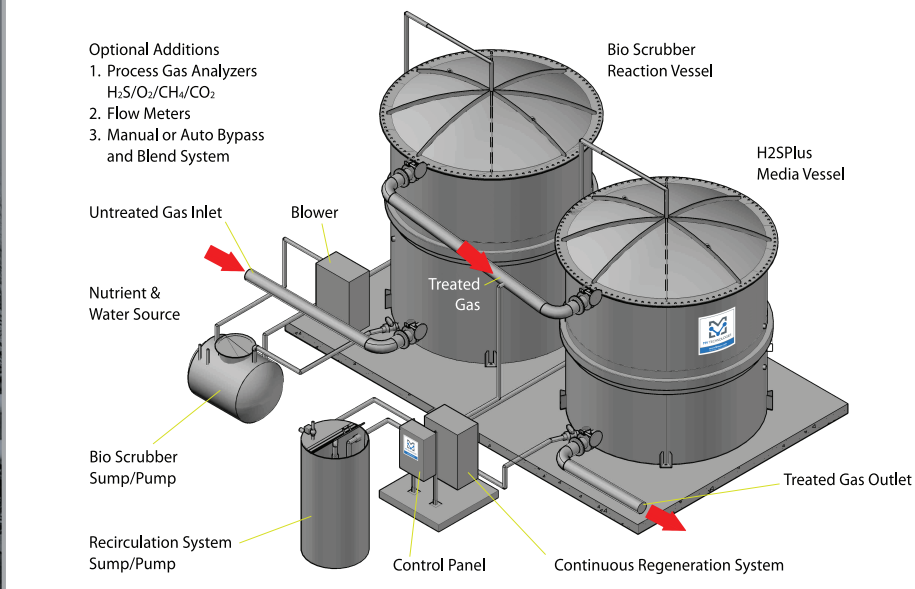
This unique system brings together the advantages of both technologies and eliminates the frustrations and performance risks often associated with standalone biological scrubbers.

Combined Technologies

Sustained Output

Reliable Results

BioH2SPlus™ Hybrid System



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Q: Do stand-alone biological scrubbers have an operating cost advantage over dry scrubbers?

A: Because there are no media costs this can be true. However, in application, biological scrubbers are often difficult to operate, requiring a great deal of operator attention.

Q: Why are stand-alone biological scrubbers unable to consistently meet fixed, low-level H_2S outlet limits?

A: Inherent to the nature of the biological process, if the inlet H_2S concentrations are fluctuating the resulting outlet H_2S concentrations will also fluctuate.

Combining the Best of Both Technologies

In the **BioH2SPlus** Hybrid System, the untreated biogas first enters the biological scrubber where a significant amount of H_2S is removed. This maximizes the primary benefit of biological scrubber technology: no media costs. And because the outlet of the biological scrubber is then routed to the dry scrubber where the balance of H_2S is removed – the fluctuating concentrations and environmental sensitivity of the biological scrubber are of little concern. Our hybrid system allows for a simpler biological scrubber, reducing necessary operator attention.

As the untreated gas is first exposed to the biological scrubber, the media consumption in the dry scrubber unit is reduced substantially in high H_2S concentration environments – again reducing media costs. And the dry scrubber delivers the specified outlet concentration without fail, independent of any fluctuations of the incoming gas stream. In fact, the dry scrubber will deliver target outlet conditions even when the biological scrubber is offline for maintenance.

The combined cost and operating advantages of the **BioH2SPlus** Hybrid System are significant.