

## GAS FLARE and GAS BUFFER – key process elements for Biogas Handling



# GAS FLARE and GAS BUFFER – key process elements for Biogas Handling

## Technology

Anaerobic Reactors are today state of the art in effluent treatment for Recycled paper Mills and other Industrial Productions with high Effluent Loads (e.g. Breweries, Food Production and others). Key benefit of Anaerobic Waste Water Treatment is the Production of Biogas, which is not generated at a perfectly steady rate, nor is demand (e.g., CHP or boiler) always constant. Therefore a biogas buffer tank provides temporary storage to equalize fluctuations in production and consumption and maintains stable gas pressure.

In order to prevent emergency venting due to Biogas overproduction, and especially when the Biogas Buffer storage capacity has reached the maximum, a controlled Flare safely burns the surplus gas, and acts so with as safety device and it must not be vented directly to the atmosphere (methane is a potent greenhouse gas).

## Features

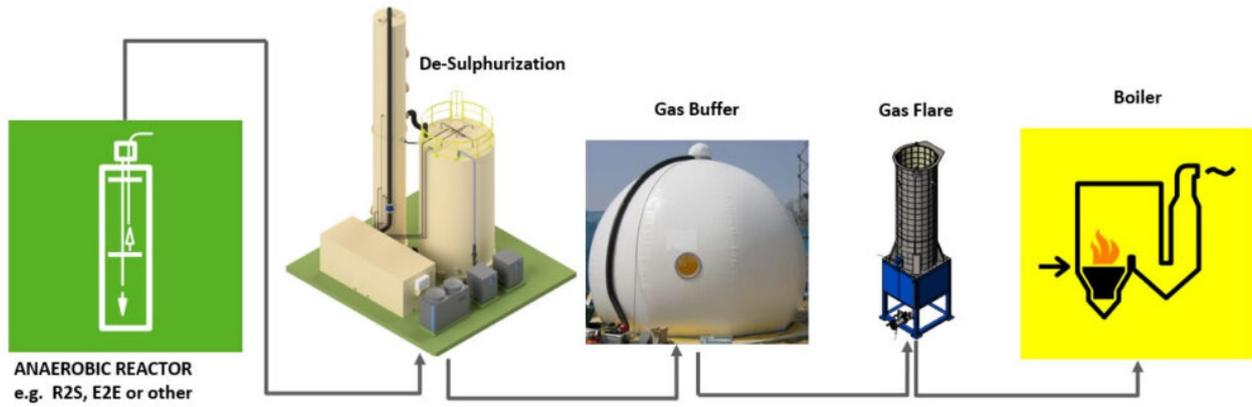
- Compact **Biogas Buffer** provides pressure regulation as Flexible Membrane Gas Holder, with “Double Membrane Domes” mounted on a flat concrete foundation.
- Automatic starting Biogas Flare with adapted gas burning capacity to burn surplus Biogas and acts so with as safety device up to the maximum gas flow at full operation of Anaerobic Reactor.
- Flare operates as Fully Cover Flare to avoid Flare Light disturbance and better heat control

## Why to buy

- Balancing of Gas Production & Consumption – Biogas production is continuous (microbes never stop working) – Consumption (CHP, boiler, grid injection) is variable
- Provides a steady gas pressure to Incineration Power Plant



## Typical Configuration of a Biogas Line



## Typical & Proven Process

- Biogas Storage and Excess Biogas Burning

## See the following Products as well

- R2S Anaerobic Reactor
- E2E Anaerobic Reactor Series
- MERI BioSulph Biogas Desulphurization



**Meri Environmental Solutions GmbH**

Bodenseestr. 113  
81243 Munich, Germany  
Tel. +49 89 59 33 44  
info@meri.de

**Voith Meri Environmental Solutions, Inc.**

2620 E. Glendale Avenue  
P.O. Box 1262  
Appleton WI 54911-1262, USA  
Tel. +1 920 734-8485  
info@meriusa.com

**Meri Sistemas e Tecnologia Ltda.**

R. Friedrich von Voith, 825  
São Paulo - SP - 02995-000, Brasil  
Tel. +55 11 3944-6644  
meribrasil@meribrasil.com.br

**Meri Environmental Technology  
(Kunshan) Co.,Ltd.**

No. 665 Jiande Road, Zhangpu Town,  
Kunshan City, 215321 Jiangsu Province,  
China  
Tel. +86 51 28 68 90 834  
info@meri.cn

[www.meri.de](http://www.meri.de)



**Note:** All product-related data and information in this publication shall serve for information purposes only. They shall not be interpreted or intended to represent any kind of warranty or guarantee. The only legally binding statements are those contained solely within our quotations. Errors and omissions excepted. Technical data are subject to change.