



## GMR – Gas Mixed Reactor

### Description:

Anaerobic degradation of organic compounds is very efficient for highly loaded well degradable organic compounds with limited salt concentration. Organic ingredients are transformed into methane and carbon dioxide.

Effluent from washing of sugarbeets is highly loaded with well degradable organic substances and calcium salts at the same time. During degradation calcium carbonate is formed, tending to crystallize inside the reactor on the equipment. Especially stirrers are affected, when salts crystallize on the blades.

Our gas mixed reactor (GMR) compresses the biogas and leads it back to the center of the methane reactor. Consequently, good mixing is achieved, while the equipment is not affected, operating well within the sugar campaign.

This technology is well established in the sugar industry. In the last three years, we have equipped three sites with new gas mixed reactors and the additional equipment.

### Advantages:

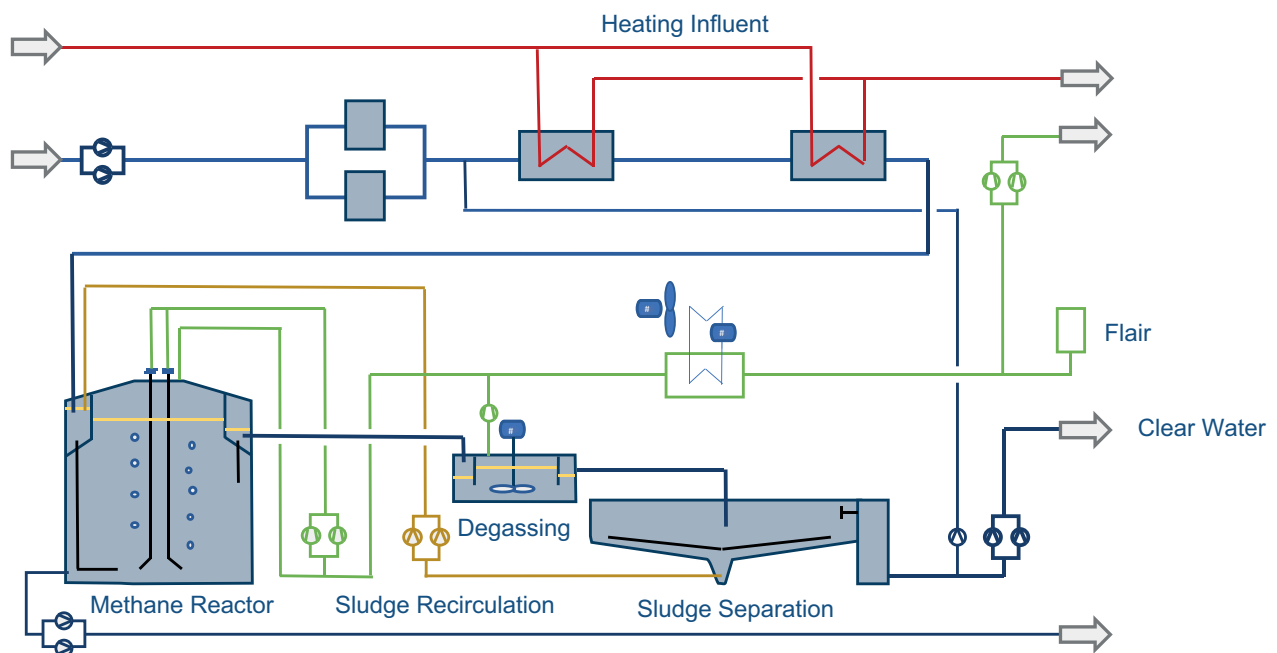
- ▶ Reliable operation.
- ▶ Compact design.
- ▶ Approved process.
- ▶ Three references for BHU.



*Sludge thickening*

**Technical data:**

- ▶ Volume flows between 50 and 250 m<sup>3</sup>/h for each system.
- ▶ Loading usually 9 to 12 kg COD/ (m<sup>3</sup> x d).
- ▶ Reactor in emaille or stainless steel.
- ▶ Piping usually in 1.4571

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