

# BIOGAS FLOW MEASUREMENT & RECORDING IN A REPUTED STARCH INDUSTRY, GUJARAT

# **PROBLEM**

Starch products are produced from corn processing. The process effluent waste water produces Biogas as a by-product with the help of the fermentation process. Biogas produces waste-gas (Biogas) used for heating boilers and generators for energy conservation.

- Biogas is generated at very low static pressure approx. 800mmwc to 1200mmwc.
- Biogas is generated at very low velocity & contains high moisture content (3%-5%vol)
- Existing orifice/ vortex flow meter doesn't work at low flow rates.
- Existing orifice/vortex flowmeter creates high pressure drop so have to increase pressure by the blower system with additional investment.

## **OUR SOULTION**

Leomi – 586 Insertion Thermal Mass flowmeter

- High turndown down ratio of 100:1 against 4:1 of existing installation.
- No pressure drop against the existing flow meter can be installed after the gas holder, saving energy cost by removing blower system.
- High accuracy against orifice/ vortex flowmeter.
- Works well even in high moisture content.
- Doesn't require a shutdown for installation
- No maintenance than the existing flow meter used.

#### **INSTALLATION FACTS**

Leomi 586 is installed in the biogas generation pipeline after a gas holding tank in 6" (DN100) pipe with flow rates of 600Nm3/hr range. Works even in high moisture conditions and at very low flow rates upto 3 Nm3/hr as well. Working trouble free since year May'2019 at customer site.

# **CUSTOMER**

Highly reputed starch plant, Gujarat

## **PRODUCT**

LEOMI- 586, Insertion Thermal Mass Flowmeter

#### **WHY LEOMI**

- An ISO 9001:2015 company, Startup India recognized
- German technical collaboration Engineered in India
- India's First In-house fully automatic wind tunnel calibration system
- Product quality proven for more than 20 years installed worldwide.





