

## Interview with Max Stalder, Bio Gas Plant Owner

## Bio Gas Reference Statement.

In the beautiful valley of Visp in Canton Wallis Switzerland, Agricultural Engineer Max Stalder is operating his Bio Gas Plant. He has MAN engines of different two MAN 2876 LE302 series, 200kW and MAN 0836 LE302 at 100kW. Latter is for standby and high peak gas production season only.



The plant has been in operation since 01. January 2006 and has so far produced 9.100.000 kWh

Max Stalder has just recently replaced the first MAN 2876 LE302 engine which produced 42'000 operation hours without any major overhaul.

In order to remain innovative and being ahead with latest and reliable technology, Max Stalder grants us his site for R&D on products such as Mixer, Speed Control, Integral Actuator, Ignition System and Air Fuel Ratio Control. All these products have been mounted to his engine since long time and have gained several thousand hours without any interruption or any issues. The products installed are: RM-25-0; AF-2000; SG-100; HT-TM-2200-75L with adaption kit KT-GAS-MAN-33276 for the original MAN throttle and LEF-100 including coils and mounting rail.

Max Stalder states that since he uses our LEF 100 ignition system he has gained considerably more operating hours on spark plug life. He also says that he does not need to clean nor service the mixer or any other product from Huegli Tech.

Plant Details:

Capacity: 300 kW

Bio Mass: Food waste 10 %; Cow Manure 85 %; Waste from Food industry 5 %

Engine: MAN 2876 LE302 (First engine 42'000 h operating hours, second

engine 10'000 h operating hours) MAN 0836 LE302 26'000 h

operating hours

Gas filter: Air, Active coal, Ferrosorp

Gas composition: CH4 60 % CO no values % O2 1.5 % H2S < 100 ppm



## Short Interview with Max Stalder:

- How much H2Sppm does the bio gas contain? < 100ppm</li>
- How long approximately is the pipe from Fermenter to the Engine? 80 100 m
- Is there only one filter, such as the active coal filter? Air and Active coal Ferrosorp
- How often do you need to service the engine, such as oil etc?
   Every 650-750h oil change, all 2500 h service according to MAN specs.
- How did you get to know Huegli Tech Switzerland?
   I have seen the Huegli Tech products on another application before, so, I got to know the Huegli Tech Company and since then we have remained in contact. I receive good inputs for my Biogas plant and since I know Huegli Tech I am in good hands.
- Are you satisfied with the Huegli Tech products?
   I am very satisfied with the products of Huegli Tech
- Is there a specific Huegli Tech product which you think made a beneficial change to your application?
   RM-25-O Mixer, SG100 Control, HT-TM-2200-75L Actuator
- Did the HT-SG-100 make any difference to your application?
   The engine operates much smoother with no more fluctuations.
- What can you say about the HT-TM-2200-75L actuator?
   Much better performance since the actuator has been integrated to the throttle valve. It is a compact design, maintenance free and there are barely any load fluctuations.
- What can you say about the Huegli Tech support and service?
   Solution oriented, absolutely reliable, helpful and friendly.
- Is there anything specifically you wish to say about the products or the Huegli Tech Company?

They are very serious about their work and I am very satisfied with the Hügli Tech Company and their products. It's a customer and future oriented company and they are always seeking to design new products and solutions for any customer issues.

In case there are any specific questions, you can directly ask Max Stalder by email: max.stalder@bluewin.ch

The interview was conducted by Emrah Uzunlar, Product Manager for Governing and Gas Division on the 12<sup>th</sup> February 2014.





## Some Snapshots of the site











