AEB ENGINEERING

CTRL-FERM

PATENTED SYSTEM FOR FERMENTATION PROCESS MONITORING

BENEFITS

- ACCURATE AND INTERFERENCE-FREE MEASUREMENT OF CO_2 AND H_2S LEVELS
- REMOTE PROCESS CONTROL USING SIM REMOTE SENSING
- QUICK AND EASY INSTALLATION
- AN INDISPENSABLE TOOL TO GUIDE WINEMAKERS IN MAKING THE RIGHT NUTRITION CHOICES
- DEVELOPMENT OF CLEAN, MORE COMPLEX AROMATIC WINES WITH NO NEGATIVE REDUCTION NOTES

Preventive and simultaneous control of **CO_2 and H_2S** production is carried out using **Ctrl-Ferm,** an innovative **system patented by AEB ENGINEERING** for the **measurement** and **monitoring of fermentation processes**. With **Ctrl-Ferm**, winemakers can take preventive action by detecting **H_2S** before it is picked up by the senses, thus enabling better nutrient influx management.

AEB ENGINEERING: THE HIGHEST QUALITY AND RELIABILITY

Like all our systems, **Ctrl-Ferm** is manufactured by our **AEB ENGINEERING division**, which guarantees the highest quality and reliability of AEB technologies by means of **100% in-house, on-site production**. The uniqueness of **AEB ENGINEERING** lies in the unwavering **support by our technicians**, both during installation and after-sales. For an unparalleled service that is flexible and tailored to the customer needs.

THE MAIN SOURCES OF H_2S IN FERMENTATION

Alcoholic fermentation in musts is a complicated process that requires careful and balanced **nutrition of yeasts. Harvest year, terroir, cultivar, ADY kinetics** and **vinification technology** all affect the nutritional requirements of yeasts, with risks including slow fermentation, stuck fermentation or the **emergence of unpleasant odours**. In addition, **errors in must sulphiting** or **poor management of O_2 input** in the initial stages of fermentation may compromise the final product. The emergence of H2S indicates when the addition of nutrients is required in order to **prevent the *off-flavour* effect**, and thus improving wine quality.

Preventive and **simultaneous control of CO_2 and H_2S** production is carried out using **Ctrl-Ferm**, a **system patented** by our group for the measurement and **monitoring of fermentation processes.**

OPERATION

Ctrl-Ferm operates in a very simple manner – once the detector is positioned in the tank, the system begins to suck in gas and, via a number of **sensor cells**, a graph of the detected quantities of CO2 and H2S is plotted, which can be viewed by winemakers using an **online dashboard**, or even remotely on **their smartphones.**

RANGE

TWO CTRL-FERM MODELS ARE AVAILABLE DEPENDING ON CELLAR REQUIREMENTS:

- for the control of **1 single tank**;
- for the simultaneous control of **5 tanks**.

COMPONENTS

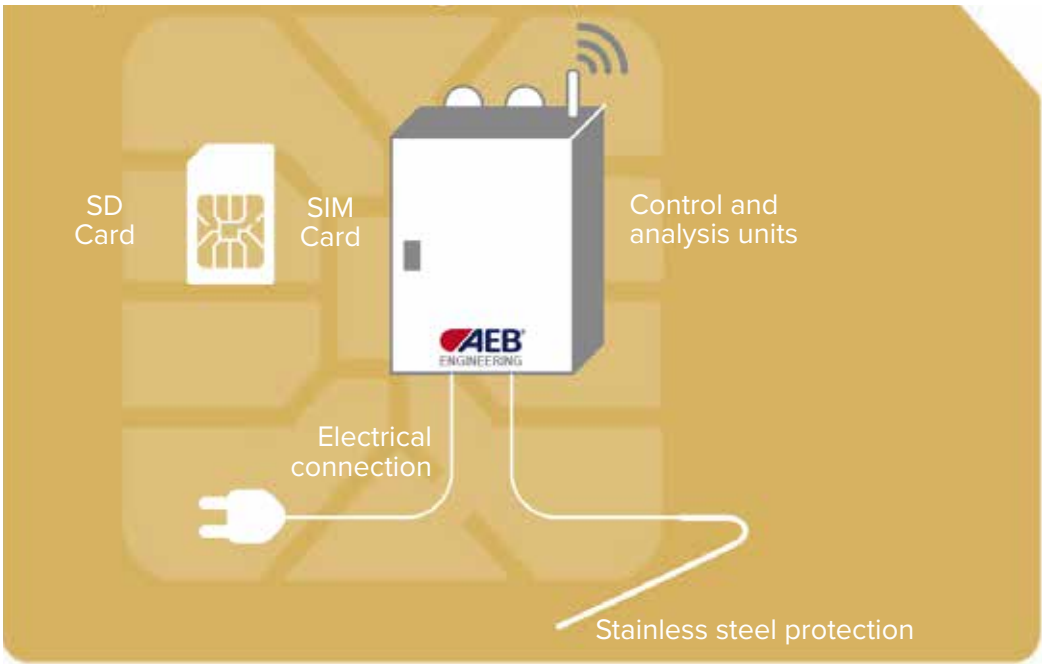
CTRL-FERM CONSISTS OF THE FOLLOWING:

GAS SUCTION PIPE
To suck in the gas that accumulates in the upper portion of the fermentation tank. This manifold rests on the upper lid of the tank.

TWO GAS SENSORS
One for the detection of CO_2 and the other for the detection of H_2S, specifically configured.

CONTROL UNIT
Connected to a server via a data SIM communication system to monitor gas production.

SD CARD.



CTRL-FERM OPERATING DIAGRAM