Short reference



THE TRANSPARENT BREWERY

Universal use of operating data





The filling plant is one of the largest consumers

UNIVERSAL USE OF OPERATING DATA

CUSTOMER REQUIREMENT

Veltins is one of the largest German breweries. Accurate operating data is essential for the continuous expansion and modernization of the production facilities, especially in times of rising energy costs. To this end, the pulse inputs of the meters were initially fed to the production data acquisition system via PLC.

This procedure was to be replaced by direct recording based on measurement devices with suitable interfaces. The requirements of the departments are diverse. While the electrical workshop is mainly concerned with safety, capacity planning and power quality parameters, the process control technology focuses on energy management and ISO 50001 certification.

THE SOLUTION

Initially, meters with pulse output were replaced by Janitza UMG 96S energy analyzers with Profibus interface, which were a good fit for the PLC infrastructure that was widespread in automation. With the installation of an Ethernet network, Veltins switched to direct recording via Modbus.

There are now around 200 Janitza measurement devices in use. Two types are particularly common: The UMG 509 power analyzer for transformer feeds and for incoming goods monitoring of electrical energy. This allows short-term grid anomalies to be recorded and temporal correlations with production to be analyzed. It is complemented by the UMG 96RM-E multifunctional analyzer for larger outgoing circuits and systems. In addition to measuring energy in both



Gerald Fritzen explains the power grid monitoring software Gridvis®

directions, it also measures harmonics currents up to the 40th harmonic and residual currents, for example, and can seamlessly record load profiles for energy management systems such as ISO 50001. The UMG 20CM is used for many RCM measurements, e.g. for end consumers. It is capable of both energy data acquisition and residual current measurement. With 20 current measurement channels, it can record harmonics currents up to the 63rd harmonic. It can be expanded to up to 116 channels using additional modules.

CUSTOMER BENEFIT

Veltins derives multiple benefits from the system, for example in terms of energy tax refunds. There are also key performance indicators (KPIs) that show the relationship between energy and production volume. This provides a precise



insight into the plant, even into very complex processes. Thanks to open interfaces, the measurement devices can be used in several systems in parallel: Meter readings and active power are sent to the in-house PDA system, while the GridVis® can also be used to obtain other valuable data, for example on power quality.

The measurement devices also enable residual current monitoring (RCM). This makes system monitoring much easier and also ensures greater safety. Above all, it makes the recurring insulation measurement in accordance with DGUV regulation 3 superfluous.



Service

Ethernet Modbus

COMPANY PORTRAIT

Janitza develops complete solutions for energy measurement technology that ensure transparent energy flows and monitor the quality of the energy supply. The globally active company, headquartered in Germany, offers individual solutions for customers from various industries, such as data centers, the manufacturing industry, buildings and infrastructure as well as energy supply companies and renewable energies.

HEADQUARTER

Janitza | Location Germany Vor dem Polstück 6 35633 Lahnau Phone: +49 6441 9642-0 Email: anfragen@janitza.de

GLOBAL

Janitza | Location USA Phone: +1 888 526 4892 Email: sales-us@janitza.com

Janitza | Location Australia Phone: +61 441 544 114 Email: sales-au@janitza.com

Janitza | Location India Phone: +91 900 386 6980 Email: sales-in@janitza.com Janitza | Location Austria Phone: +43 7942 214 966 194 Email: anfragen-at@janitza.com

Janitza | Location UK Phone: +44 7939 697 434 Email: sales-uk@janitza.com

Janitza | Location Middle East Phone: +971 54 404 8001 Email: sales-in@janitza.com

