



# Application Report Energy Monitoring in Brewing with Simatic-IT Historian

Energy is an important cost factor, not only in the brewing industry. All the more important is its monitoring and analysis. In a brewery in Bremen, Germany, a Simatic-IT server equipped with a monitoring package developed by KAT generates automatic up-to-date reports.

The monitoring server collects and archives **several hundred values** plant-wide, from the sectors electricity, water, pressure, gas, compressed air and brewery-specific CO<sub>2</sub>. The data are polled from automated sources via **OPC**, **manual input** in web pages, and **external databases**.

**Automatic reports** are created daily, weekly, and monthly and distributed to the relevant departments by **E-mail**.

The **standard reports** display the data for creation, distribution, consumption and for the **key performance indicators** (KPI) per time interval as tables and graphs, subdivided for each operating sector and metering point.

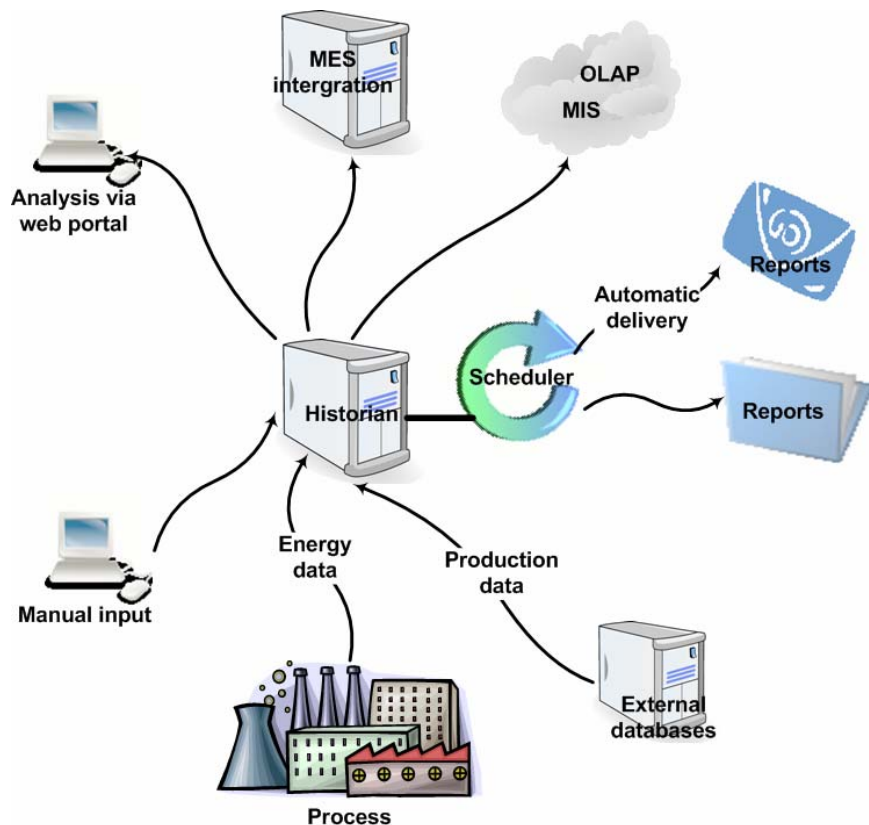
Other reports can be called up from the **web portal** and processed further with **Excel** and other office software.

For reports based on order numbers or products, the **batch numbers** and **production orders** are correlated with the energy data.

All data is available **online for three years**. Older archives can be included for **long-term analysis**.

The foundation of the project was the concerted **analysis and documentation** of the energy and media networks. In this process, all necessary metering points were identified and all reports were defined.

A **standardized equipment model** allows for the subsequent change and expansion of the metering points, independent of already defined reports. All configuration changes are documented **in accordance with audit requirements**.



With **Simatic-IT** as the framework, the energy monitoring can easily be integrated into **MES solutions**, or expanded. In addition, standard interfaces to **OLAP** and **MIS** are available as links to controlling and billing processes.

Out of this custom development, **KAT-Package Energy Monitoring** was developed, consisting of consulting, installation and adaptation of data monitoring and reports.

For **analyses and test installations**, a demo configuration is available from KAT. With it, initial reports can be created with real data within the first few days of the trial run.