



SMART MONITORING WITH STRUCTURE-BORNE SOUND ANALYSIS

Making machines readable



OUR SOLUTION FOR INTELLIGENT MAINTENANCE OF YOUR SYSTEMS USING STRUCTURE-BORNE SOUND ANALYSIS

In order to avoid cost-intensive downtimes and to preventively maintain your machines, permanent condition monitoring is necessary.

The solution consisting of the smart products of the sysWORXX brand and the bacsoft IoT-Plattform offers the optimal possibility to detect wear, penetrated foreign bodies or loose connections early by means of structure-borne sound analysis.

In addition, this solution can be combined with other standard sensors and actuators (e.g. temperature, energy consumption, humidity, ...). This gives you an overall picture of the condition of your equipment and enables you to enhance the analytics of your existing machines with options such as energy monitoring.

YOUR BENEFITS

ECONOMICAL & EFFICIENT

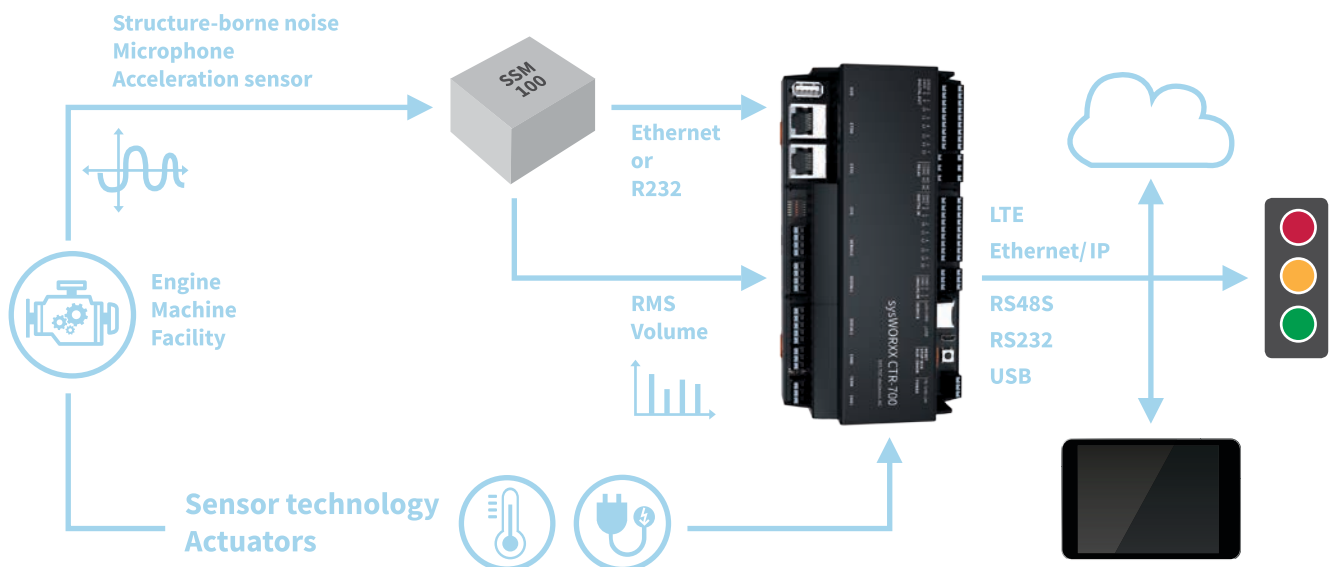
Cost savings through remote monitoring of distributed facilities & prevention of downtime through predictive maintenance

SWIFT & SIMPLE

Quick implementation through easy to learn tools for convenient retrofitting of existing systems.

INDIVIDUAL & FLEXIBLE

Adaptation & extension through freely programmable Smart Controller and customization options of the bacsoft IoT platform.



THE MAIN COMPONENTS OF OUR SOLUTION:

► **sysWORXX Smart Controller**

Our powerful industrial controller based on the sysWORXX CTR-700, which also serves as a communication gateway and enables a direct cloud connection for remote monitoring and control. The Edge Controller is freely programmable by the user for local pre-processing of data and control tasks.

► **Extension module sysWORXX SSM-100 (Structure-borne sound analysis modul)**

This measuring module provides the signals of the structure-borne sound sensors as digitally processable data to the main controller. This enables the analysis and evaluation of vibrations of mechanically moved components. An analysis of up to six channels simultaneously is possible, e.g. to measure the three spatial axes individually at two measuring points. The frequency range extends from 1 Hz to 1 kHz. Transformations and filter algorithms are customizable and can be adapted to individual customer requirements.

► **bacsoft IoT platform**

The bacsoft platform is an end-to-end solution for designing and managing advanced IoT and M2M applications. bacsoft offers the expertise to integrate the sysWORXX hardware and provides a cloud-based application for remote monitoring and control of operational processes.