

The test system is based on our SOMA software platform and provides selected functionalities on the topic of Predictive Maintenance. It is a stand-alone system with a 24V interface to connect your sensors.

You can retrieve your machine data and analyses conveniently via web browser from any end device.

We offer our SOMA Test System on loan or for purchase.



Data Acquisition



Visualization



Analysis



Alert Management & Connectivity

Hardware:

- Industrial PC with 40 GB SSD and local database for the analysis of historical data
- Connection of 2 vibration sensors (IEPE)
- 4-channel analog input terminal, e.g. for temperature sensors or pressure sensors
- 3-phase power measurement terminal for the connection of transformers
- 2-channel digital input terminal with oversampling 24 V DC, e.g. speed sensors
- 8-channel digital input terminal 24 V DC, 3ms
- 8-channel digital output terminal 24 V DC, 0.5A
- Delivery in a control cabinet (500 mm x 500 mm x 300 mm) incl. power supply

Vibration Analysis:

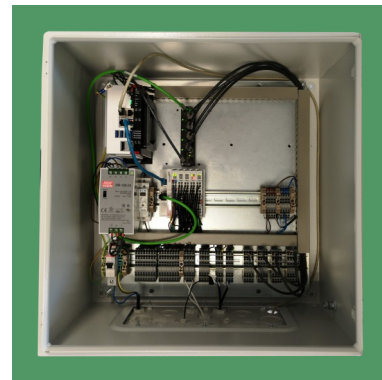
- RMS value for acceleration, speed, and distance
- Calculation of FFT, HFFT, Crest-Factor
- Detection of imbalance, bearing damage
- Compare runs of measurement trends

Measurement of Current, Voltage, Power, and Power Quality via 3-Phase Power Terminal:

- Measurement, comparison, and forecasts of RMS energy consumption
- Cyclic measurement of performance values and comparison of their course (detection of drive unit anomalies)

Standard Sensors:

- 2 x IEPE vibration sensors with magnetic holder
- 3 x transformer 60A/1A
- Further sensors on request



Measurement of Analog Values:

- Cyclic measurement of sensor values and comparison of their course (reference drive)

In General:

- Statistics: moving average, standard deviation, quantile
- Trends: linear, exponential
- Presentation: historical, live, or analysis data
- Configuration: measure intervals, limit values
- Archiving in local database
- Alert Management: visualization and setting of digital outputs