

Burat & Klein
Datentechnik GmbH



At home in Meckenbeuren on Lake of Constance for more than 35 years...

... we are active as a company around the field of dynamic measurement technology

Our goal:

"Measurement technology for everyone understandable: quickly and easily to the right result."



// Founder Rudolf Klein

"We maintain exceptionally good partnerships with our customers and look forward every day to supporting and advising you on your challenges and to advise you."

Competent, social, personal - that's what we stand for".



// Managing Director Flora Winkler (born Klein)

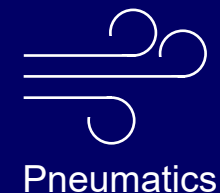


High-tech measuring systems

Operable by anyone and for all industries



- Measurement technology for testing, development, final inspection, commissioning, maintenance and (on-site) service
- Test bench modernization and digitalization
- Processing of a wide range of input variables
- Hardware and software from a single source
- Measurement and product trainings
- Inhouse calibration lab



We support you in your projects from consulting to implementation ...

... up to the support for your applications

Measurement consulting

- Demand analysis
- Measurement conception
- Independent sensor search service with sensor consulting
- Planning for the integration of existing sensors

Implementation

- Adapter service
- Cable service
- Hardware planning and customized assembly

Acquisition and evaluation

- Measuring system including suitable amplifier (transmitter)
- Software for acquisition and evaluation
- Training center on site

After-Sales service

- Remote maintenance
- Technical support
- Software updates
- Calibration lab
- Repair service

MultiMessBOX and Mini- (Prüf-) MessBOX

Signal conditioning and highly dynamic measurement data acquisition



MultiMessBOX



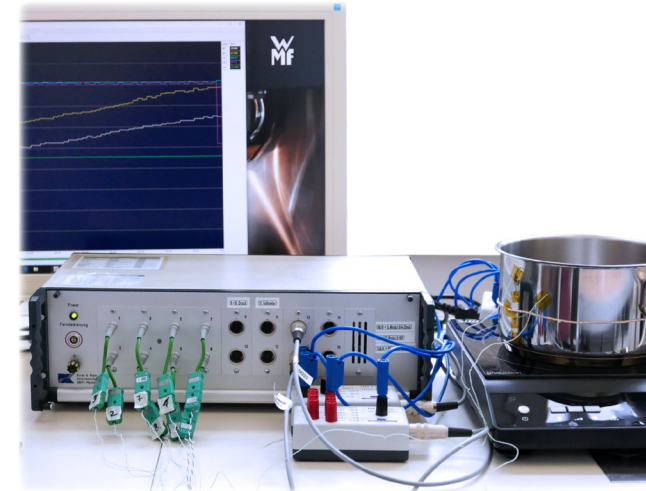
MiniMessBOX



PrüfMessBOX

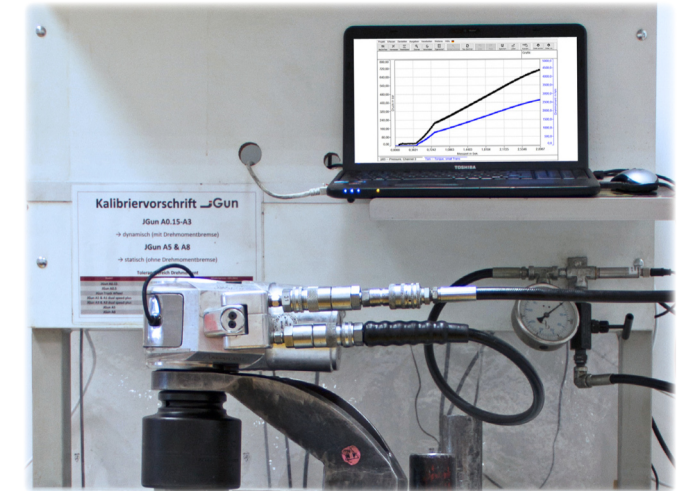
- Highly dynamic acquisition with a sum sampling rate of up to 500 kHz
- Processing of up to 256 sensor signals simultaneously
- Interface independent (analog, CAN bus, Ethernet, serial)
- Real time synchronization
- Calculation, event, filter and file import channels
- Modular integratable measuring amplifiers for various input signals

Application examples



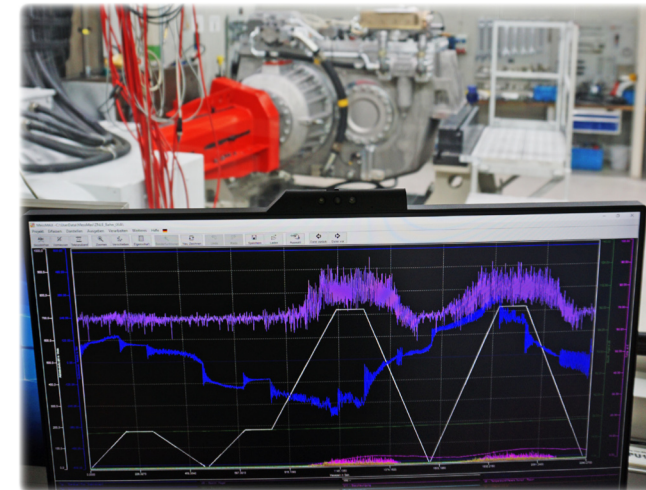
Heating and power measurement

Heat distribution in the pot and measurement of the power consumption of the induction field



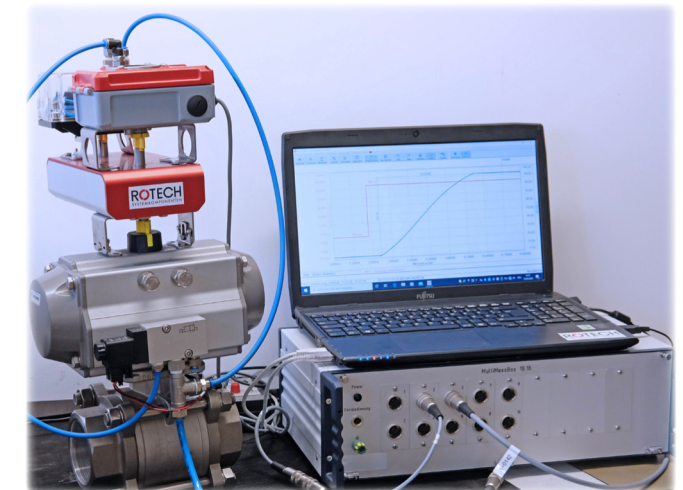
Calibration of screwdriving tools

Recording and documentation of torque curves on hydraulic / pneumatic / electric industrial screwdrivers



Engine/gearbox testing

Measurement of speed, torque, pressure, temperature, vibration, sound and other parameters



Test/final testing of actuators / valves

Fully automated comparison of setpoint specification to position feedback, dead time, adjustment time, torque, ... for valves and fittings

TeleInspektor®

Automatic data acquisition with remote access



Kompakt / Mini and Smart



Multi

- Autonomously operating measuring system optionally modular via measuring amplifier modules or customer-specific equipped measuring inputs (voltage, current, strain gauge, CAN, ...)
- Integrated measurement data processing, wireless data transmission
- Consisting of: Measuring system with internal pc and LTE module
- Secure Internet connection for full remote access
- Automatic e-mail dispatch of measurement files and evaluations, both cyclically or depending on (measurement) events



Application example TeleInspektor®-Kompakt: Live measurements in the PistenBully

Accelerations, torques, displacements, forces, speeds, temperatures, strains and other measured variables are recorded on the vehicle during travel. Their signal characteristics can also be observed directly from a distance, and the measurement settings can be adjusted. At the same time, the measurement files can be sent cyclically or event-driven to the test engineer via e-mail. Parameters deviating from the ideal are immediately detected and can be corrected if necessary.

MessVerstärker (amplifier/transmitter)

Flexible and robust

For all common sensors we produce the suitable, computer-controllable **MessVerstärker**, which convert the sensor signal for acquisition or amplify it if necessary. Due to the identical housings, they can be installed in the Burat & Klein **MessBOX** / **TeleInspektor®** and exchanged or extended as required. The robust metal housing and the reliable electronics promise a high long-term and temperature stability. Burat & Klein offers an in-house calibration laboratory for the recalibration of the measuring amplifiers and the sensors.



Metrics

Current



Torque



Pressure



Stretch



RPM



Temperature



Voltage



Rotation angle



Force



Position



Acceleration



further more

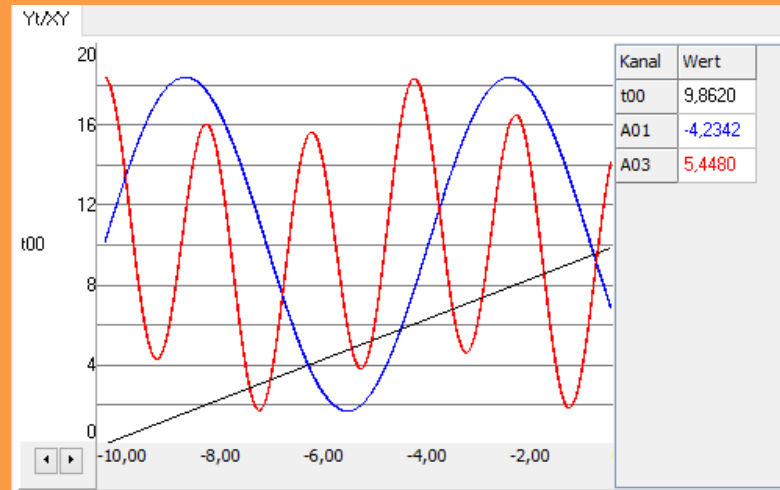


MessMAX®

The software for measurement data acquisition and evaluation - as well as for actuator control

Measure - Control - Evaluate

One software for all devices



Configurable visualizations, XY display, FFT analysis, time write, overlay of measurement files and circular buffer measurement

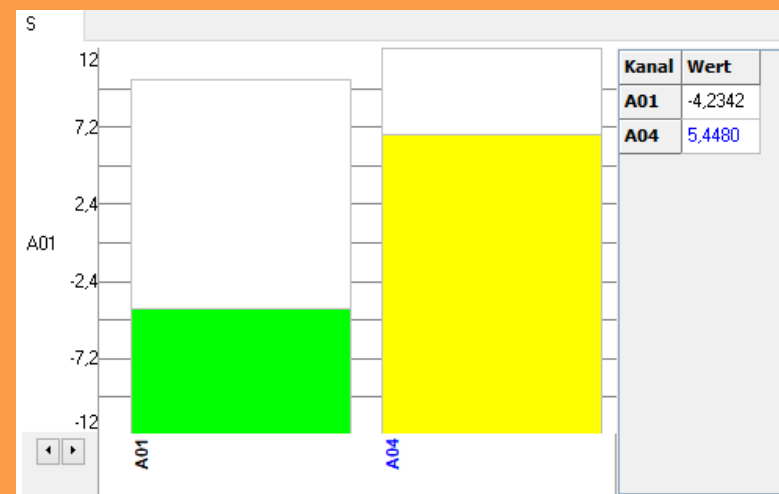
Event channels for signal or alarm output or for starting a measurement. Freely configurable via slopes, limit values and differentials

Online calculation of measured values and logic operations

Numerous calculation functions such as curve smoothing, automatic peak value recording, measuring point labeling as well as various surveying functions

Simultaneous acquisition of all incoming measured values

Compatible with all **MessBOXes** and **TeleInspektors**. Support of CAN- Bus and electrical power measurement devices and for controlling actuators.



MultiMessBOX



MiniMessBOX



TeleInspektor®



PrüfMessBOX



Electric power meters



SteuerBOX



CAN-Bus



Modbus TCP



Burat & Klein Datentechnik GmbH

Brochenzeller Str. 23
88074 Meckenbeuren
Germany

Tel.: +49 (0) 7542 200 90
Fax: +49 (0) 7542 200 91

E-mail: info@burat-klein.com