Machine Data Logger MDL

Tamper-proof process data logging

No more warranty problems
through usage-based warranty

Warranty without time limits
usage-based instead of time-based

Efficiently operate machines to full capacity
through strict monitoring of operating parameters

More efficient production – minimize risks and costs
through load-based service intervals

schleicher
control systems

Machine Data Logger MDL

Safety through usage-based warranty period

The tamper-proof Machine Data Logger (MDL) permanently stores any type of process data. It provides an incorruptible audit trail of operating conditions, machine usage, machine maintenance etc., allowing manufacturers to give performance-based warranties.

Warranty periods based on actual use instead of time expirations provide enormous advantages for machine manufacturers and users. Conventional time warranties are based on the machine's guaranteed lifespan, while also taking into account hard-to-calculate risk factors such as constant machine operation at the performance limit or negligent maintenance. The MDL rules out such risks: manufacturers can now exactly define their warranties, while users can plan reliably.

Increase availability and minimize maintenance costs

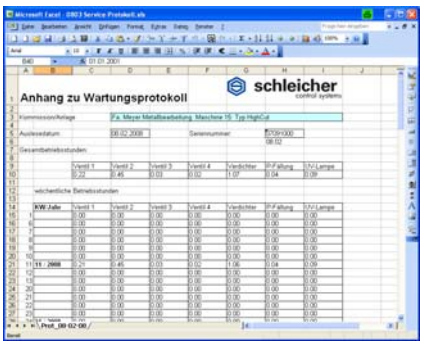
The Machine Data Logger can help users save costs by means of usage-based service intervals. The MDL supports early warning functions implemented by manufacturers, which cause alarms if specific operating parameters approach a limit. Thereby, production standstills are reduced and maintenance costs only arise dependent on load. The tamper-proof logging of operating data via MDL increases a machine's sales value and creates additional safety for rental machines, e.g. machines for the construction sector.

Tamper-proof monitoring

Manufacturers can configure and lock the MDL via a PC program. During operation, the master PLC stores the selected process data in the MDL's non-volatile ROM via Profibus DP. Each access instance is internally logged and timestamped. All data is stored for 15 years, and can be read out as a spreadsheet by the machine manufacturer via the USB interface. Each MDL is linked to a specific machine and, similar to a dongle, blocks the PLC when deactivated. Moreover, exchanging the MDL or accessing the stored data is impossible.

Extra useful in case of damage

PLC setting parameters can be stored in the MDL, which enables re-booting or replaced PLCs to self-configure via the MDL. The maximum extension of Profibus DP segments allows for the MDL to be installed outside of plant sections with hazardous operating conditions. However, even if the MDL is destroyed, the memory chip can usually be read out by Schleicher.



Process data can be analyzed on a PC by means of a spreadsheet program.

Data

- available from May 2008 for Profibus DP, CAN-bus and Profinet versions planned
- ROM allows for a virtually unlimited number of write access actions
- 24 V DC power supply
- 9 pin D-Sub Profibus connector
- USB 2.0 slave socket
- Profibus switch for address selection
- status LEDs
- IP20 protection according to EN60529
- DIN rail mounting according to EN50022-35
- suitable for ambient temperatures between 0 and 55 °C
- CE mark
- special circuits protect the memory from overvoltage
- memory capacity sufficient for several thousand parameters

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