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## Pressure Data Logger in the Bottle

### **Application:**

Are bottles cracking during pasteurization in a tunnel pasteurizer, and you do not know what maximum pressure is reached inside the bottle during the process? We have the solution for you. Our bottle pressure data logger is designed for precise measurement and recording of the pressure inside the bottle as well as the ambient temperature, for example during pasteurization in a tunnel pasteurizer. This allows you to easily monitor the pasteurization process and prevent bottle damage.

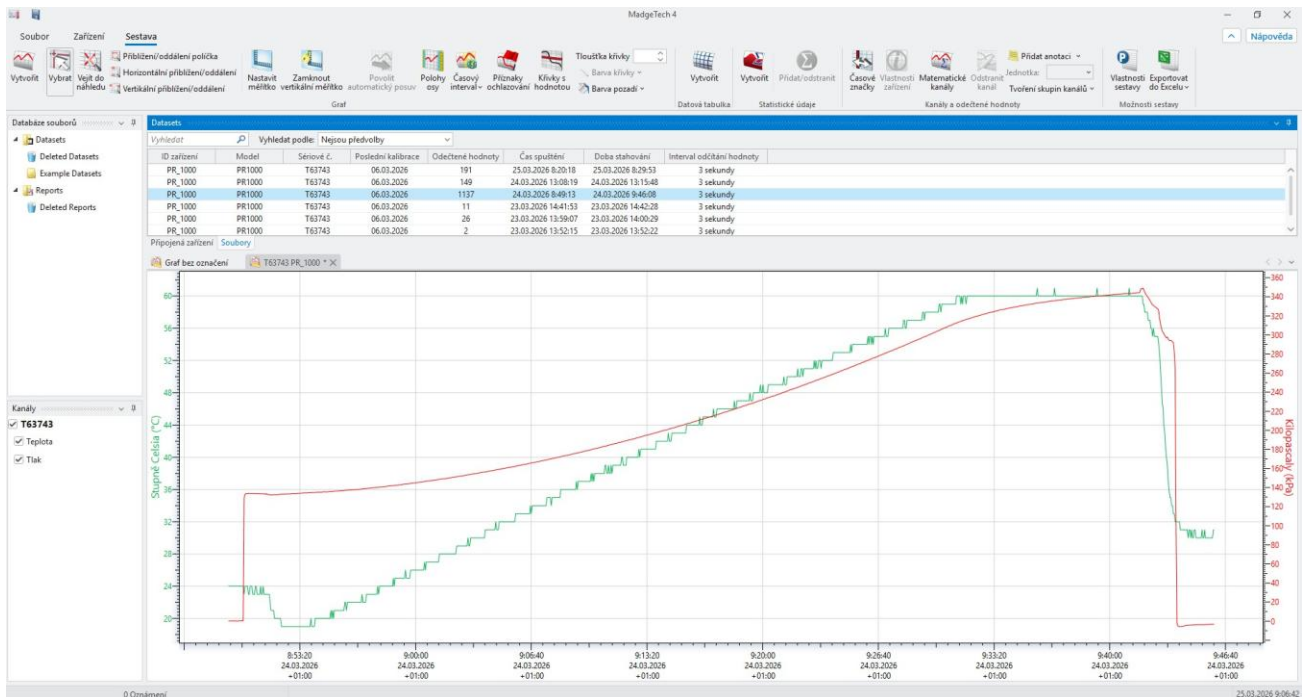
### **Technical Description:**

The device is designed for bottles with crown caps. It enables secure attachment to the bottle, piercing of the crown cap, and its hermetic sealing (without pressure loss during cap piercing). In addition to the data logger itself, the delivery includes a docking station and software for installation on a PC. The data logger is placed into the docking station connected to the PC via a USB cable. The PC is used to start and stop measurements, configure measurement parameters (measurement interval, threshold configurations, and user-defined time periods, etc.), and download the recorded data, which can be displayed in the form of graphs and tables or exported to Excel.



## The evaluation software provides the following features:

- Compatible with WINDOWS 11, WINDOWS 10, WINDOWS 8, and WINDOWS 7 operating systems
- Start and stop of measurements
- Configuration of measurement parameters
- Transfer of recorded pressure and temperature data from the data logger to a PC
- Graphical display of temperature and pressure curves
- Tabular display of measured values
- Export of measured values to Excel
- Printing of curves on a printer
- Archiving of measured data on the PC
- Reloading of stored data from the PC and displaying it on the computer screen, or printing it on a printer



## Technical Specifications:

Parameter	Range / Specification
Pressure measurement range	0 to 700 kPa
Temperature measurement range	up to 80 °C
Protection rating	IP68
Operating temperature	up to 80 °C
Material	Stainless steel
Pressure measurement accuracy	2 %FSR, 0.25 %
Temperature measurement accuracy	1 °C
Calibration	From PC using software
Measurement interval	Default value is 3 sec, adjustable
Memory	2,000,000 values
Battery	3.6 V lithium battery, user replaceable
Battery life	Typically 1 year
Weight	1 kg

### **Scope of Delivery:**

- Piercing device with pressure data logger PR1000-100-PSIG - 1 pc
- USB communication interface for data loggers IFC400 (docking station) - 1 pc

### **Key Advantages:**

- No need to recharge the battery in the data logger.
- High accuracy and calibration capability: Ideal for laboratories with an established ISO 9001/9002 quality management system.
- During crown cap piercing, the seal is created first and only then is the cap pierced. Therefore, no gas escapes from the bottle during the piercing process.

### **Frequently Asked Questions (FAQ):**

- **Is it necessary to recharge the battery in the data logger?**  
No, the data logger is equipped with a 3.6 V lithium battery with a typical lifetime of 1 year. Once discharged, the battery can be easily replaced.
- **Is it possible to calibrate the data logger?**  
Yes, the data logger can be calibrated, including the issuance of a calibration certificate. This is ideal for laboratories with an established ISO 9001/9002 quality management system.