

Dam Monitoring

Instrumentation monitoring is an essential part of each dam safety programme. In addition to regular visual inspections, large amounts of data are collected and a dedicated software is an indispensable tool to make use of this data in order to maintain a safe operation. For this purpose, AFRY has developed the software DAMOSY.

Our services

AFRY is able to process and provide expert analyses from extensive amounts of collected data:

- **Data archiving:** The data is imported by hand or through a standard spreadsheet program (e.g., MS Excel). An extension for reading directly from the measuring instrument is possible.
- **Data analysis:** Parameters or other theoretical values can be calculated from the stored data by implementing deterministic, hybrid or statistical models. Statistical models can be created directly with DAMOSY.
- **Data presentation:** all data sets, whether imported or calculated, can be exported as lists or displayed graphically. The graphic output is automatic and the following display modes are commonly used:
 - Measured values as a function of time
 - Measured values as a function of another measured value, e.g. as a function of the reservoir level
 - Comparison of measured values with theoretical values and their confidence intervals
 - Comparison of values from two different instruments
 - Long term charts showing just the annual minimum and maximum values
 - Long term charts illustrating the past year in detail and the envelope of the measured values for previous years
- The menu language can be selected by the user.

Your advantage

We created the user-friendly software DAMOSY to manage a regular flow of measured values from instrument readings. The data is stored, processed into logical parameters and displayed in numerical or graphical charts. This output serves as the basis for dam safety analysis and reporting.



Our experience

- Development and application of the program since 1990
- In-house application during annual expert inspections of dams at home and abroad
- Use of the program for dam authorities in Indonesia, Honduras and Myanmar
- Applicable to arch, gravity, buttress and embankment dams
- Internal and external training for users
- Client support in the analysis process