



# Falling rock protection kit

## EAD 340059-00-0106 (ETAG 027)

As an ISO/IEC 17025 accredited test house, we carry out tests according to the guideline for European Approval EAD 340059-00-0106 (formerly ETAG 027) of the European Organisation for Technical Approval (EOTA), as well as certifications according to ISO/IEC 17065.

- ✓ **TESTING**
- ✓ **CERTIFICATION**
- ✓ **DEVELOPMENT SUPPORT**
- ✓ **COMPONENT TESTS**
- ✓ **ANALYSIS**

### ENERGY INPUT

Rockfall protection barriers of different energy classes can be tested thanks to differently dimensioned concrete blocks. A distinction is made between horizontal drop (test facility in Vauffelin) and drop in free fall (test facility „Lochezen“). The impact speed is defined as at least 25 m/s.



*Differently dimensioned concrete blocks*

### YOUR BENEFITS

#### Competent

From testing to certification, everything from a single source

#### Innovative

Additional measurement equipment for extended data evaluation and analysis available

#### Flexible

Horizontal and vertical tests are possible. Short-term availability of the test facilities

#### Accreditation

ISO/IEC 17025 accredited test lab

#### Notification

ISO/IEC 17065 notified certification body

## TEST FACILITIES

The following test facilities are available:

- Horizontal test facility: up to energy class 3 (1'000 kJ)
- Vertical test facility „Lochezen“: all energy classes (up to 10'000 kJ)



Concrete block on a horizontal test apparatus



Horizontal test

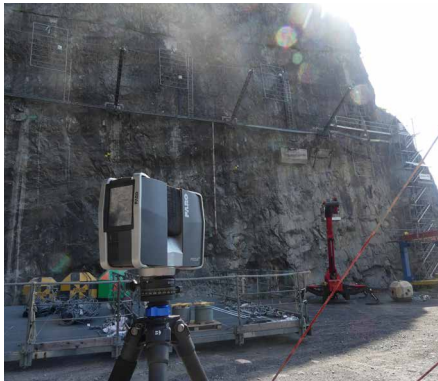


Vertical test „Lochezen“

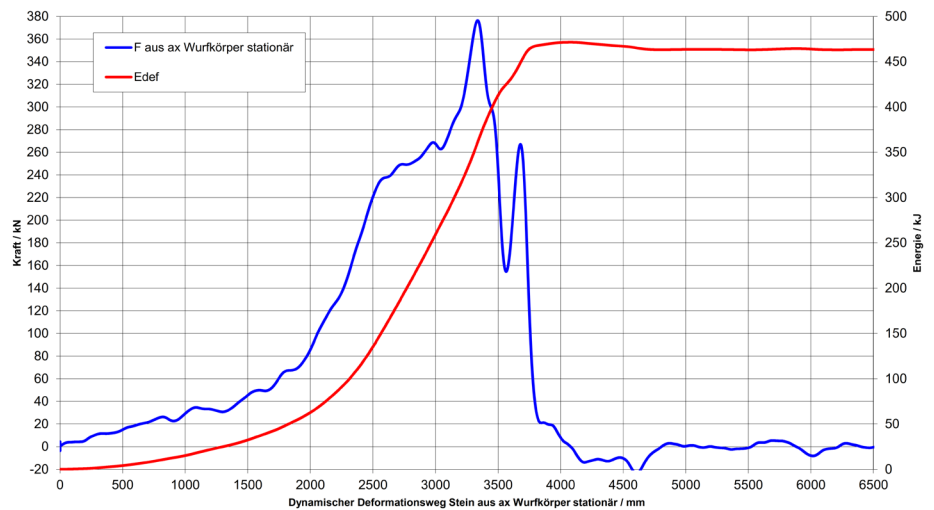
## DATA ACQUISITION

Modern measuring equipment is available for the best possible analysis of the test criteria:

- 3D laser scans to determine the residual height, as well as barrier-specific additional examinations (e.g. column angle).
- High-speed cameras with variable resolution and frame rate to determine the maximum deflection and general analysis of the system behaviour
- Load cells installed in the barrier with a measuring frequency of 20 kHz to record the anchor forces
- Measurement equipment in the concrete block to analyse the energy input and the force curve as a function of the deflection.



3D Scanner



Energy absorption of the concrete block

