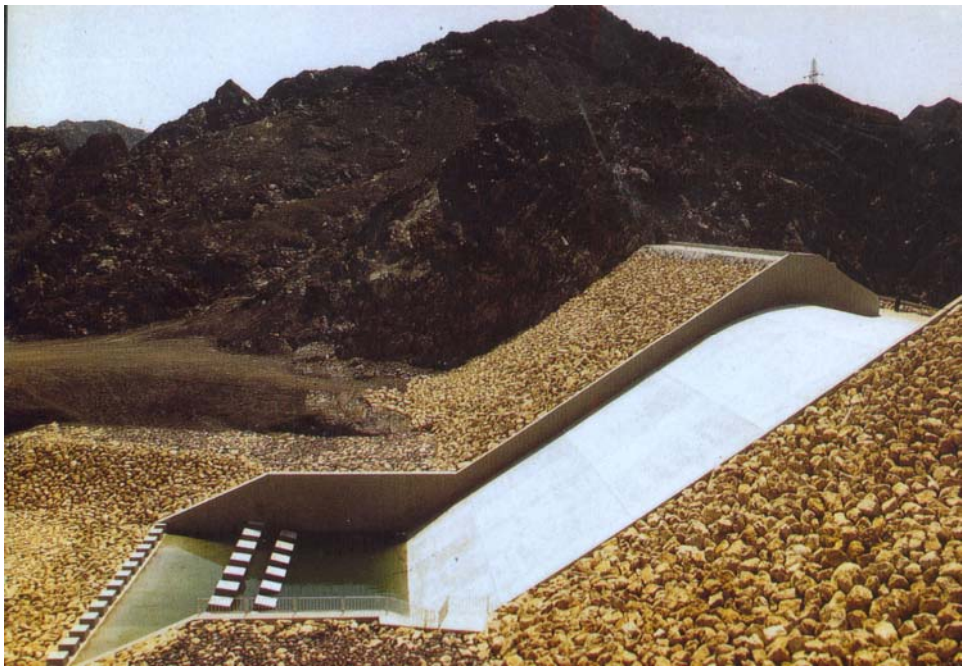
# Schmallwasser Dam, Germany

osmos
Integrated safety for structures



## Safety monitoring during construction works

### Client

Hydroprojekt Weimar

### Structure

Schmallwasser Dam
Rock fill dam in Germany for the supply with drinking water in Thuringia

### Context

The Schmallwasser dam was under construction. Its use is mainly to ensure the water supply to a whole province in Germany.

Its construction technique is innovative with the existence of an asphalted core.

### Client's Needs

The client needs to monitor in 3 dimensions the possibility of cracks appearing between the asphalt and the concrete part.

The thickness of the asphalted core is also monitored during the construction time.

### Instrumentation Installed

14 optical extensometers have been installed for the 3 dimensions monitoring. The sensors have been embedded inside the asphalt.

### Initial Results

The data gathered by the monitoring have shown that the cracks between the asphalt and the concrete parts remain inside an acceptable interval.

### Client Benefits

Thanks to the OSMOS system, the client can monitor the deformations of the dam and intervene very precociously in case of an aggravation of the cracks, without any hindrance in the water supply.

*View of the Schmalwasser site*

*Concrete/asphalt junction of the extensometer*

*Positioning of an asphalt seal*

*Checking the quality of the asphalt*