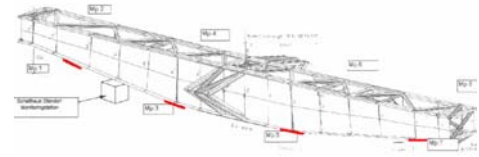


Conveyor Bridge, Vatenfall, Welzow, Germany

osmos

Integrated safety for structures



Location of the monitoring equipment



Optical Strand splice box equipped with a micrometer

Availability of a bridge in a mining environment

Client

Vatenfall Europe Mining AG

Structure

Metallic feeding bridge F60 in an open-sky coal mine, built in 1972.

Context

This bridge is an essential component of the coal production of this mine.

Should this bridge be damaged, the production would stop automatically for several months.

Client's Needs

The client wishes to keep the maintenance of this conveyor bridge under very close monitoring.

In case of necessity, he wants to be informed very precociously of any serious damage in order to have enough time to study its replacement.

Instrumentation Installed

- 8 Optical Strands (4x2-m and 4x1,8m)
- 1 temperature sensor
- 1 monitoring station

Initial Results

Initial results show the conveyor bridge to be functioning in a safe mode.

Client Benefits

The client does not take any financial risk thanks to the continuous surveillance of his structure.

The monitoring will also help him to postpone as long as possible heavy maintenance work.



Optical Strand without protection



Optical Strand with protection



TÜV Rheinland Group