

Lohsa Railway, Germany

osmos

Integrated safety for structures



Optical Strands installation on the track

Sinkhole monitoring

Client

DB Netz AG, Niederlassung Südost

Structure

Railway between Horka-Falkenberg,
km 60,0 – km 60,8 (Lohsa Train Station)
Double line Railway, built in the 1950's

Context

The railway has been built over a mining
area, which has now abandoned. Fears of
local subsidence have come after the rising
of the water table level.

Client's Needs

The client has to reduce the speed of the
train down to 50 km/h. The client wishes to
use his railway line optimally without any risk
to the train traffic

Instrumentation Installed

- 20 x 10-m Optical Strands
- 1 temperature sensor
- 1 monitoring station

The equipment can monitor up to 800
meters of rail tracks.

Initial Results

The track settlements and dumping
monitoring have been so far satisfactory.

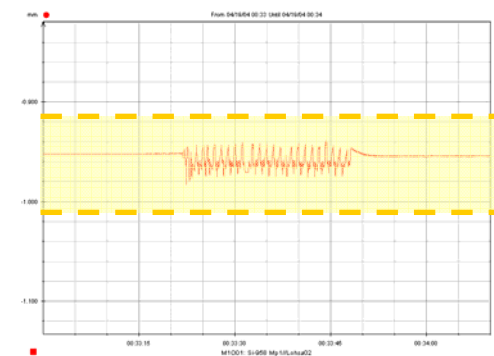
An occurrence of sinkhole will modify
considerably the dynamic deformation of a
train passing.

Client Benefits

The client can continue the train traffic in this
track section with full safety.
Reinforcement works have been underway,
and the equipment will continue to monitor
during several years again.



Monitoring station specifically designed for
outdoor operations.



Train passing through the different Optical
Strands over the tracks