

# Stability of the Highwalls of „Baufeld Westen III“, Amsdorf Open Mine, Germany

ROMONTA GmbH

Service area	Contract value	Project duration
Infrastructure Planning, Geotechnical Engineering	€45,000	2006 - 2008



## Project description:

Stability investigations for individual slopes and slope systems during progressing, active operation and for final situations considering the aspect of maximum but safe decarburization of the mine.

The soil mechanical works focused and still focus on:

- Guarantee of occupational safety during overburden and coal recovery without immediate re-support by an interior dump on the basis of determined permissible soil mechanical conditions and slope parameters
- Improvement of slope profiling in the area of the planned final situations considering the aspect of a water level increasing on the long term in the area of the slope toe (filling after operational discontinuation) and re-support by interior dump
- Guarantee of lasting stability for all individual slopes, partial and overall slope systems considering existing and future geotechnical conditions

## Purpose:

- Expansion of the construction field to the north and east for maximum decarburization of the mine.

## Further project data:

- Pit slopes with heights of more than 100 m high
- 6 to 7 transform faults
- Dip of layers in mine up to 12°
- Up to 15 soil layers
- Low residual shear strengths in the transform faults
- Upper and lower aquifer
- Highly confined lower aquifer
- Low number of dewatering elements, low dewatering progress

## Our services:

- Geotechnical supervision during mining operations
- Elaboration of stability manifests for technological interim situations and temporary final situations
- Elaboration of a final report

## Client benefits:

- Close-by hydrologists and soil mechanical engineers
- Closeness = promptness
- Quality assurance by experienced, qualified engineers (officially recognized experts) and complex interdisciplinary completion of services