

LANDESTALSPERRENVERWALTUNG DES FREISTAATES SACHSEN  
(Federal state reservoir authority of the free state of Saxony)  
Am Staudamm 1| 02625 Bautzen

BAUER Spezialtiefbau GmbH  
BAUER-Straße 1  
D-86529 Schrobenhausen, Germany

**Project: Flood control reservoir Rennersdorf**  
**Service provided: Installation of an additional inner cut-off wall in the dam structure**

Dear Ladies and Gentlemen,

After the successful completion of BAUER Spezialtiefbau GmbH's works we would like to express our gratefulness and appreciation for the services rendered. BAUER executed the above mentioned works absolutely perfectly and to our fullsatisfaction.

BAUER Spezialtiefbau GmbH, having its headquarters in BAUER-Str. 1, 86522 Schrobenhausen, was awarded the execution of a diaphragm cut-off wall using the cutter soil mixing method (CSM) in the dam area of the flood control reservoir Rennersdorf.

The cut-off wall was installed in a depth of up to 28.70 m and thus is the deepest cut-off wall in Germany ever constructed with the cutter soil mixing method.

**contract details:**

construction period:	October 2013 to May 2015
execution location:	Rennersdorf, Free State of Saxony
contractor:	BAUER Spezialtiefbau GmbH
client:	Landestalsperrenverwaltung des Freistaates Sachsen federal state reservoir authority of the Free State of Saxony (an authority within the responsibility of the Saxon State Ministry for the Environment and Agriculture)

**Executed Services:**

- Identifying suitable mixtures for in the injected suspension
- Compiling execution concepts, method descriptions and quality assurance plan

**Branch Spree/Neiße**  
Zawod Sprjewja/Nysa

**Your contact partner**  
André Wunderlich

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Your ref.

Your mail dated

File ref.  
(pls. state in reply)  
5.171.00180.003\_HRB Rennersdorf

Bautzen,  
07. July 2015



address:  
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BIC HYVEDEMM496  
USt-ID-No: DE199521669

\*no access for electronically signed or encoded electronic documents

- Mobilizing of all necessary resources
- Planning and implementing of the site installation and of the material supply
- Execution of additional geotechnical soil investigation
- Replacement borings  $\varnothing$  620/880 mm to remove obstacles within the trail area
- Constructing a milled cut-off wall  $d=64$  cm using the cutter soil mixing method (two-phase-system)
- Connection onto the throughflow structure via jet grouting (HPI)
- Fullface embedment into the solid rock by cutting in
- Construction and dismantling of work platform on the dam crest as well as subsequent earthworks
- Installing drainage pipes

**Details concerning works executed by BAUER:**

**Soil and/or underground conditions:**

Dam area: fractured blend of minerals 6/63 mm, cohesive soil with lime stabilization

Underground: granodiorite deposits, sporadic granodiorite and/or aplites up to 100 MPa

**Cut-off Wall:**

execution area:	approx. 5,000 m <sup>2</sup>
wall thickness:	64 cm
max. depth:	28 m
slurry:	1 <sup>st</sup> phase: bentonite-slurry 2 <sup>nd</sup> phase: bentonite-cement-slurry
rigs:	BAUER BG28 with 2 nos CSM-cutter drivers BCM 10
additional equipment:	bentonite-cement mixing plant, silo and containers for storage of bentonite slurry and auxiliary equipment

**Replacement bores:**

execution length:	approx. 5,500 m
drilling diameter:	62/88 cm
max. depth:	16 m
filling material:	gravel and/or sand
rigs:	BAUER BG28

**Connection using high pressure injection (HPI):**

execution length:	approx. 260 m
column diameter:	80 to 120 cm
max. depth:	up to 28.50 cm
rigs:	BAUER IB 18

The works, especially the construction of the cut-off wall, were executed most expertly and professionally.

When difficulties or changes occurred BAUER was looking for the best technical and economical solutions in close cooperation with the client and the specialized consultants.

The way in which the BAUER project team prepared and executed the works deserves our utmost appreciation. The quality management and the quality controls resulted in excellent quality and precision of the services executed.

BAUER's responsible approach to work safety, health and environmental protection was in all respects persuasive.

The project was completed within the scheduled time and cost frame.

Yours faithfully,



Sebastian Fritze  
Branch Manager  
Branch Spree/Neiße