


KSB Solutions
**Lake Markkleeberg
Canoe Park
Germany**

Recreation park

The canoe park on Lake Markkleeberg is Europe's most modern whitewater facility. Officially opened on 15 April 2007, it was conceived as a venue for Leipzig's bid to host the 2012 Summer Olympic Games. The facility serves as an Olympic training centre for Germany's whitewater canoeists and as a venue not only for the German and European Championships, but also for World Cup canoe-slalom sporting events. Last but not least, the facility is open to the public as a sports and recreation park, e.g. for white-water rafting.


Gaining momentum with KSB.

The shores of an abandoned and reclaimed open-pit mine – today's Lake Markkleeberg – are home to the park's artificial whitewater courses featuring variable flow and obstacles along a competition and a training run. KSB selected, supplied and installed the half a dozen requisite submersible motor pumps and all attendant piping, valves and supporting structures. Three of the pumps feed the training run, and all six charge the competition course. They pump the water from Lake Markkleeberg up to the starting basin. The siphon effect of the sump discharge points in the competition basin was exploited to optimise the pumps' input power.





Economic efficiency

The canoeing facility is in operation from April to October. Consequently, the pumps' operation had to be guaranteed efficient. This is achieved through their high efficiency at the duty points and by exploiting the siphon effect in KSB's

patented siphon tank structures installed over the collection sump discharge points. Before the facility was built, model trials were run in cooperation with Kaiserslautern Technical University to optimise the shape of the siphon tank.

Lake Markkleeberg Canoe Park, Germany – Scope of supply and project details

Scope of supply:

4 Amacan PA4 1500 – 1060/480 12UAG1
 2 Amacan PA4 1500 – 1060/400 12UAG1
 6 pump sumps of various special designs

3 gate valves with electric actuator, DN 1400
 Diverse grey cast iron and steel pipes, DN 1400,
 incl. supporting structures

Technical specifications:

4 x 5.11 m³/s to 5.8 m, 460 kW
 2 x 3.61 m³/s to 5.8 m, 380 kW

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