

COTTER SADDLE DAM

GIN GROUTING



MENARD BACHY



Client: ACTEW
Consultant: GHD

Contractor: Abi Group/John Holland
Specialist Contractor: Menard Bachy

THE PROJECT

The Enlarged Cotter Dam project involves enlarging the Cotter Dam by almost 20 times its current size from 4-78GL. It is one of three important water security projects ACTEW and its alliance partners are delivering to help provide a secure future water supply for the ACT region.

One of the main advantages of the Enlarged Cotter Dam is that it will have relatively minimal impact on the environment. This is because it will be constructed in an area already impacted by the existing reservoir on land that was badly affected by the 2003 fires and previous forestry plantations.

MENARD BACHY'S ROLE

The Bulk Water Alliance (BWA) represented by a joint venture of Abi Group and John Holland contracted Menard Bachy in February 2010 to realise the gin grouting (crack injection) operations over the two new saddle dams of the Enlarged Cotter Dam project. The project consisted in the drilling of 70 primary holes, 70 secondary averaging a depth of 30 metres deep and 140 tertiary holes to an average depth of 18 metres deep.

Furthermore, 1 out of 4 of the primary holes have been cored to check the integrity of the ground and 6 cored check holes have been realized to check out the effect of the grout injection. With the help of Soletanche Bachy's expertise, Menard Bachy successfully completed the pressure grouting at various pressure (2 to 10 bars) in accordance with the 6 metre stages depth of the holes. The three computer controlled PH 2*5 pumps allowed 6 injection points at the time and were controlled using Soletanche Bachy's internal software such as spice to control the pumps, Sphinx and scan 3D to summarize and present the result to BWA.

After a difficult start the project has been successfully completed within the delays of the contract and leded Menard Bachy and Soletanche Bachy to be the best sub contractor option for BWA to realise the gin grouting of the main dam.