



Tunneling

Reference Details:

Owner Metropolitan Water District of Southern California (MWDC) +++
Consultant Ebasco Team, a Joint Vent between Black&Veatch and Woodward Clyde +++
General Contractor Joint Venture of Atkinson Construction, Washington Construction and H.B. Zachary
DSI Services Supply of DYWIDAG rock bolts dia. 25mm, St 500/550 and dia. 26,5mm, St 835/1030; Supply of equipment; Technical support on site .



DYWIDAG rock bolts in California’s largest water project

Riverside County, CA, USA: Eastside Reservoir Project

To meet increasing water demand, the Metropolitan Water District of Southern California has planned the construction of an impressive project which will nearly double Southern California's surface water storage. Part of this \$1.9 billion project, the largest in California, is already under construction. The entire project was successfully completed in 1999.

The three earth and rock dams (West Dam, East Dam and Saddle Dam) will create an off-stream reservoir and pipeline to impound about 1 billion m³ of water from the Colorado River Aqueduct and from the State Water Project Aqueduct. The largest compound of this project is represented by the 2.7 km long and 87 m tall West Dam which will contain about 46 million m³ of earth and rock, whereas the smaller Saddle Dam contains about 2 million m³. In November 1996 construction of the inlet/outlet tower will be out for bid and the East Dam was scheduled to be bid in spring of 1997.

and the future inlet/outlet tower will be stabilized with high strength Ø 26.5 mm (1 " gr 1 50) grouted DYWIDAG rock anchors. A total of about 8 km of resin rock bolts and 5.8 km of grouted rock anchors are estimated for this project.

DYWIDAG Ø25 mm (48 gr60) THREADBARS[®] are already being used as resin rock bolts to support weak rock formations of quartzite inside the 450 m long upper adits and gallery tunnel, Slope cuts around the tunnel

DSI USA Long Beach is supplying the rock bolts as well as the equipment and contractor support during installation. The project was successfully completed at the end of 1998.