



■ Miscellaneous



Reference Details :

Owner California Department of Transportation (Caltrans) +++
General contractor Atkinson Construction, San Diego, CA and Traylor Brothers, Irvine, CA, USA
+++ **Engineering** McDaniel Engineering Company / J.Muller International, San Diego, California, USA

DSI Services Supply, install, stress and grout of 64 tons of post-tensioning MA multistrand tendons and 62 tons of post-tensioning THREADBAR[®].

Retrofit with DYWIDAG Multistrand Tendons

The Seismic Retrofit of the San Diego-Coronado Bay Bridge using DYWIDAG Multistrand and THREADBAR[®] Post-Tensioning Tendons

Built in 1969 the San Diego-Coronado Bay Bridge is an unmistakable landmark of downtown San Diego and one of the seven large state-owned toll bridges that are currently undergoing seismic upgrading.

The 20-m wide bridge carries 75,000 vehicles per day connecting the Coronado peninsula to the major I-5 highway that runs through San Diego. The main toll bridge consists of 32 spans, is about 2,380 m long, and has three main channel spans with lengths up to 198 m.

The superstructure is a steel box supported on twin, up to 60 m tall, reinforced concrete piers. The bridge is built on an active seismic fault zone that created great challenges to the designers that had to take into consideration among others, a fault rupture of nearly 1 m of ground displacement. Seismic design required seismic isolation at shorter piers and strengthening of the column cap beams. Strengthening was accomplished by adding concrete to the cap section and

post-tensioned with DYWIDAG multistrand and THREADBAR[®] tendons placed in both directions. Construction of this \$95 million retrofit project is under way and was successfully completed at the end of 2002.

www.dywidag-systems.com