



■ Marine Structures

Reference Details:

Owner Qatar Chemicals Company Ltd., Doha, Qatar +++
General Contractor AMCON Project Management, Doha, Qatar +++
Subcontractor Swissboring Overseas Corp. Ltd., Dubai, U.A.E.

DSI Services Supply of all anchor components and required equipment for the fabrication and stressing of 100 double corrosion protected DYWIDAG Multistrand Anchors, 12 x 15.7 mm, with a length of 40 m each; Supervision of anchor fabrication and installation as well as testing and stressing of the anchors.



DYWIDAG Permanent Strand Anchors for seismic upgrade of a quay wall

EPC marine dock for the Q-Chem project, Mesaieed, Qatar

The 900 m long quay wall built by AMCON for the Q-Quem Petrochemical Complex in Mesaieed Industrial City in Qatar was to be anchored down to withstand seismic events.

For this purpose 100, type 12 x 15.7 mm, St 1570/1770 double corrosion protected Permanent DYWIDAG Strand Anchors conforming to German approval, were used. The 40 m long anchors were installed with an inclination of 45 degrees. The free anchor length measured 32 m and the bond length was 8 m.

To minimize cost, the anchor components were delivered loose to the site and there assembled into anchors. For the assembly the following processes were carried out:

- cutting the PE-sheathed greased strands, delivered on wooden drums with a length of 2,400 m, to the lengths required,
- removing the PE from the bond length of the individual strands,
- cleaning the grease off the bond length using the WAP C 1250 device and a special cleaning lance,
- assembling the anchors,
- installing and grouting the anchors, and 7 day later
- testing and stressing the anchors in accordance with BS 8081.

Whereas drilling was carried out from floating platforms, the anchors were installed from the quay using a crane. The project was in particular characterized by an extremely short construction period:

Fabrication and installation of the anchors was completed within one month after commencement of the drilling activities in January 2002. The work were completed to the satisfaction of all participants.

www.dywidag-systems.com