



**BURGAN CAPE TERMINALS**  
Cape Town, South Africa



**Project Facts**

**Product**  
Dynamic Compaction

**Market**  
Industrial – Tanks

**Client**  
Burgan Cape Terminals c/o  
Chemie-Tech SA (Pty) Ltd

**Sub Contractor**  
Civils 2000 (Pty) Ltd

• **About the project**

Franki was awarded the contract for the design and construction of foundations for this large fuel storage facility comprising 13 No. tanks in the Port of Cape Town. Some 15 100m<sup>2</sup> of Dynamic Compaction treatment was undertaken of reclaimed land fill on the Eastern Mole for 6 x 26m Ø x 19m high Diesel and ULP tanks; 4 x 31m Ø x 19m high Diesel tanks; 2 x 12mØ x 18m high Ethanol tanks and a 15m Ø x 17m high Fire Water tank.

• **Challenges**

A big challenge was the nearby existing tanks with unknown foundations. Here FRANKI employed the services of GETEC a Keller company specializing in vibration and movement/settlement monitoring and recording. A system was installed on existing tanks which allowed for remote monitoring and reporting. This together with a 3m deep isolation trench allowed operations to proceed without incident.

Due to the presence of rubble in the made-up ground, standard Cone Penetration Test (CPT) testing was not possible, so the Continuous Surface Wave (CSW) technique was used together with Plate Load and Rotary Coring with SPTs.

• **Achievements**

The completed foundations were timeously handed over in a sequenced manner and Chemie-Tech commenced with the steel tank construction utilizing their specialist technique of all construction taking place at ground level and jacking the completed 2.4m welded plate rings skyward.

**SAFETY** was as always paramount and Franki and their subcontractor were awarded the BCT Best Company Safety Awareness trophy for 2016.

