

MINA AL AHMADI, KUWAIT:

Mina al Ahmadi #1 and #2 CALMs



Scope of Work

SOFEC redesigned the existing CALM buoy piping systems and upgraded the design pressure rating of the two Kuwait Oil Company CALM Buoys. The buoys are being upgraded for continued service to accommodate the world's largest supertankers.

General Description

Client Name:	HHI / Kuwait Oil Company
Contract Award:	April 2006
Installation Date:	August 2008
Application:	Crude Oil Export and Bunkering

Project Specifications

Water Depth:	31.7m (104ft)
Tanker Size:	Up to 456,000 dwt
Dimension:	12.5mØ x 5.3m
Floating Hose:	2 x 24-in., 1 x 12-in.
Underbuoy Hose:	2 x 24-in., 1 x 20-in. Chinese Lantern

Hawser System:	12-in. Dual grommet
Anchor Leg System:	6 x 3.75-in. ORQ
Anchor System:	6 x 42-in. Ø Piles

Design Environmental Criteria

Operational	
Significant Wave Height:	3.1m (10.2ft)
Wind Velocity:	29.8m/s (58 knots)
Surface Current:	0.7m/s (1.3 knots)

Survival	
Significant Wave Height:	4.9m (16.0ft)
Wind Velocity:	38.6m/s (75 knots)
Surface Current:	0.7m/s (1.3 knots)

Comments

Each unit is equipped with a sophisticated SCADA system for remote monitoring and control. The floating hose system consists of two 24-in. lines each with twin 16-in. tail hoses and a 12-in. bunker line.