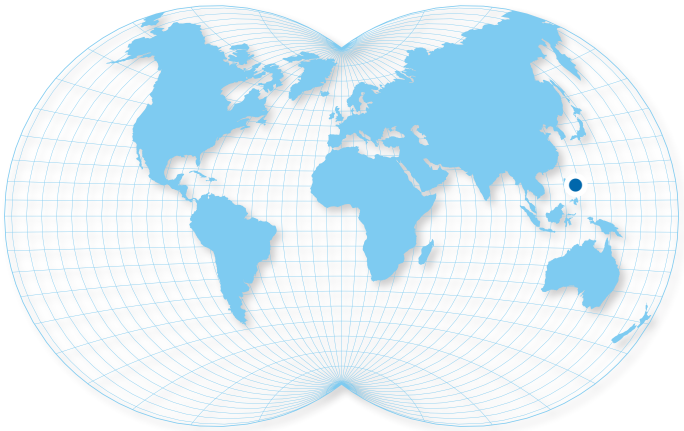
KAOHSIUNG, TAIWAN:

CPC Ta Lin Pu #3 CALM



Scope of Work

SOFEC designed and constructed a CALM buoy system for crude oil import and bunker fuel export.

General Description

Client Name:	Chinese Petroleum Corp. (CPC)
Contract Award:	July 1990
Installation Date:	May 1991
Application:	Crude Oil Import / Bunker Fuel Export

Project Specifications

Water Depth:	36m (118ft)
Tanker Size:	Up to 300,000 dwt
Dimension:	12.5mØ x 5.8m
Floating Hose:	2 x 24-in., 1 x 12-in.
Underbuoy Hose:	2 x 24-in., 1 x 12-in. Lazy S
Hawser System:	16in Dual grommet
Anchor Leg System:	6 x 4.5-in. Grade 3 stud link
Anchor System:	18mt Stevpris anchors

Design Environmental Criteria

Operational

Significant Wave Height:	4.6m (15ft)
Wind Velocity:	16.8m/s (32.7 knots)
Surface Current:	0.5m/s (0.97 knots)

Survival

Significant Wave Height:	10m (32.8ft)
Wind Velocity:	44.2m/s (85.9 knots)
Surface Current:	1.2m/s (2.3 knots)

Comments

This CALM was installed offshore Kaohsiung, Taiwan in mid 1991 for Chinese Petroleum Corporation (CPC). This dual product terminal is designed to import crude oil with simultaneous bunkering service. This PLEM attaches the 56-in. and 16-in. subsea pipelines to two 24-in. crude oil hoses and a single 12-in. bunker hose. The 12.5m diameter CALM is anchored to the seafloor by six 4.5-in. chain legs and 18mt "Stevpris" high capacity drag anchors. The underbuoy hoses are arranged in a Lazy S configuration.

The terminal is designed to moor tankers up to 300,000 dwt.