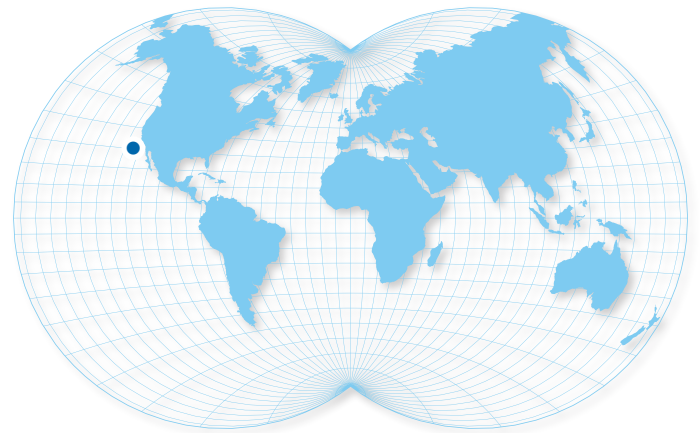


SALINA CRUZ, BAJA CALIFORNIA: PEMEX Salina Cruz CALM



Scope of Work

SOFEC designed and supplied three replacement Catenary Anchor Leg Mooring (CALM) Buoys for PEMEX REFINACIÓN in Mexico, at the Rosarito, Tuxpan and Salina Cruz. The buoys are designed to transfer gasoline, diesel, MTBE and/or TAME via tankers up to 60,000 DWT. Each buoy is capable of transferring up to 15,000 bbl/hr of cargo.

The CALM Buoy for the Maritime and Port Operations, Rosarito, Baja California, is located in 23 meters of water and connects to existing anchor chains via four equally spaced dual-flapper style chain support assemblies.

General Description

Client Name:	PEMEX REFINACIÓN
Contract Award:	April 2012
Installation Date:	April 2013
Application:	Transfer of Gasoline, Diesel, MTBE and TAME
Flow Capacity:	15,000 bbl/hr

Project Specifications

Water Depth:	26m (85ft)
Tanker Size:	160,000 dwt
Dimension	11mØ x 4.5m
Fluid Swivel Type:	Quad Path
Floating Hose:	3 x 16-in. / 1 x 10-in.
Underbuoy Hose:	3 x 16-in. / 1 x 10-in. Chinese Lantern
Mooring Bridle:	Dual Leg
Anchor Leg System:	4 x 3.25-in. Stud Link (existing)

Design Environmental Criteria

Significant Wave Height:	Not Available
Wind Velocity:	Not Available
Surface Current:	Not Available