



Corrosion Technology Services Case Study – IND-362

Conversion of FPSO Frade

Client:	SBM Offshore Group
Owner:	Chevron Petroleum
Start:	2008
Completion:	2009
CP Cost of Project:	\$ 115,000
	ICCP design and Computer Modelling for Conversion of Tanker to FPSO

Introduction

CTS company Wilson Walton Middle East Ltd. was commissioned by SBM Offshore Group to design and supply impressed current cathodic protection systems to protect the external surfaces of the FPSO Frade which was undergoing conversion in Dubai Dry Docks.

The Frade is situated in the Frade Field, which is located 375km northeast of Rio de Janeiro in the Campos Basin in approximately 1080m water depth.

The Frade is moored by an internal turret able to accommodate 33 risers and has topsides capacity for the production of 100,000 barrels of oil treatment and compression of 106 million standard cubic feet of gas, and the treatment and injection of 150,000 barrels of water per day.



System Description

Cathodic Protection was required for the hull and anchor system of the 195m vessel. The design included fore, aft and mid-section anodes with a total current rating of 600A and includes reference electrodes, automatic potential control and back-up capacity.

Also included as part of the design scope was a computer modelling exercise to demonstrate full protection would be achieved by the installed protection.

The cathodic protection system was commissioned in June 2009.
