

# DEEPWATER

## 14 RETROPODS™ AND RETROCLAMPS™ ON PLATFORM IN THE RED SEA: RAS GHARIB PLATFORM, EGYPT

### Deepwater installs a retrofit cathodic protection system for a fixed platform in the Red Sea in under 24 hours

In April 2010, Deepwater Corrosion Services, in conjunction with Egyptian agent Los Amigos, retrofitted the cathodic-protection system of a fixed platform in the Red Sea. The platform is located in 14 meters of seawater approximately one kilometer off the coast of Egypt. The owner required another 20 years of service from the aging structure, which was easily accomplished using the RetroPod™ / RetroClamp™ system.

The retrofit cathodic protection (CP) system consisted of:

- 14 x RetroPod™ (Aluminum anode pods)
- 14 x RetroClamp™ (Electro-mechanical tie-back clamps)

RetroPod subassemblies were shipped via container to Egypt from Deepwater's Houston manufacturing facilities. Once unloaded from the container, Pods were erected and welded together dockside. Meanwhile, the Pods' ballast mattress shells were filled with concrete and attached to the Pods. After lift testing, the Pods and RetroClamps™ were loaded onto the installation diver-support vessel, Maridive's Expedition. Once tied up to the platform and after minor debris removal from the seabed, all 14 RetroPods™ and RetroClamps™ were installed and commissioned in 20 hours.

Structure potentials were monitored using a diver handheld CP probe as well as a topside-deployed DC-II™ drop cell (all silver/silver chloride). CP potentials prior to the retrofit were at or near the native state of steel (i.e. (-)0.670 Volts [Ag/AgCl]); after retrofit, potentials ranged from (-)1.050 to (-)1.080 Volts.

More info at [www.stoprust.com](http://www.stoprust.com)



ASSEMBLED LOCALLY

The pods were assembled in the customer's yard near the dock.



RAPID INSTALLATION

A RetroBuoy is about to be loaded onto the work boat.



14 RETROPODS™ IN 20 HOURS

Divers placed the clamps and confirmed CP levels once the new anode sleds were attached.



FILLED ONSITE

Ballast mattresses are filled with concrete onsite to save on shipping expenses