

DEEPWATER

RETROPOD™ CATHODIC PROTECTION LIFE-EXTENSION ANODE POD

RetroPod is designed to cut costs significantly by reducing installation time for anode retrofit projects.

The RetroPod is an aluminum anode system arranged in stable, self-contained “pods” which are ideal for replacing depleted anodes on mature assets. The pods are lowered to the sea floor and connected electrically to the target structure via Deepwater’s Retroclamp system. The traditional cathodic protection retrofit method of clamping dual anodes onto existing jacket members is much more time-consuming and expensive. The Retropod can be installed in less than a quarter of the time it would take to install an equivalent amount of cathodic protection anodes using the traditional method.

Diver or ROV installed

A RetroPod is installed on the seabed just inside or outside the base of the jacket and attached with one or two RetroClamps. Depending on the depth, the RetroClamp can be easily installed by diver or ROV onto any tubular member, flange, or subsea support beam. Speed of installation makes the RetroPod extremely cost-effective, as installation costs dominate budgeting for most anode retrofit projects.

Safe for divers

There is no direct diver interaction with the heavy aluminum anodes when installing the RetroPod. A crane lowers the Pod onto the sea floor and the diver simply installs the RetroClamp tie-back. The clamp can also be installed via ROV. Traditional dual clamp-on anodes require a considerable amount of dangerous intervention while the dual clamp-on is being guided into place.

A reliable connection

The RetroClamp is patented technology, developed at Deepwater and not available elsewhere. The RetroClamp connects the RetroPod electrically to the asset it is protecting via two armored cables. The floating plate on top of the clamp ensures a strong and constant connection that won’t damage the structure. The ease of installation makes the RetroClamp incredibly cost-effective in comparison to underwater welding or other attachment methods.

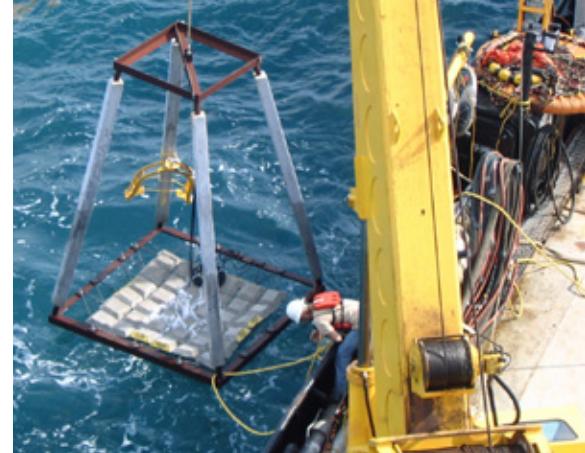
Traditional offshore structures

The RetroPod system is extremely cost-effective for replacing or supplementing cathodic protection (CP) on aging offshore structures sitting in 85 to 300 feet of seawater. The system has performed well in some installations for over 14 years, which is more than half of the design life of a standard retrofit. Since the pods can be installed with ROVs, there is no depth limit to the structures that can be retrofitted. However, some deeper structures may require additional CP near the surface.

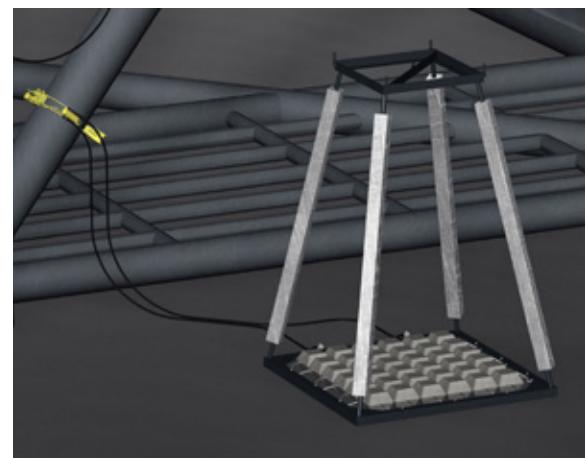
Deep-water production equipment

Taking advantage of reduced currents in deep water, many operators have begun using the Retropod system along with Retroclamps to retrofit cathodic protection on deep-water production equipment. The large amount of anode material on one RetroPod combined with the relatively small amount of exposed steel involved in a deep-water field allows one pod to adequately protect multiple wellheads, manifolds and trees.

More info at www.stoprust.com



HEADED FOR THE SEABED
A Retropod being deployed offshore in the Gulf of Mexico.



RETROPODS ATTACH ELECTRICALLY USING RETROCLAMPS
One retropod can protect multiple subsea components.



VERY COST-EFFECTIVE
Retropod installation time is only one-fourth that of traditional anode retrofits.