

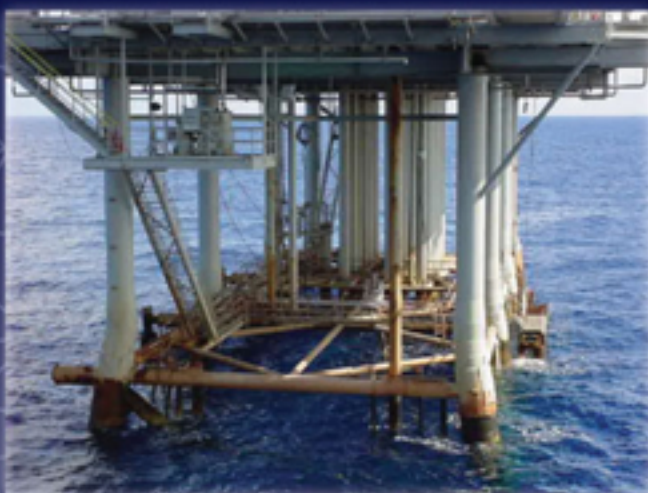
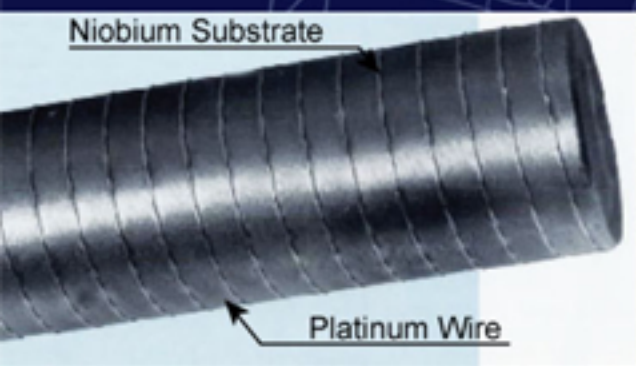
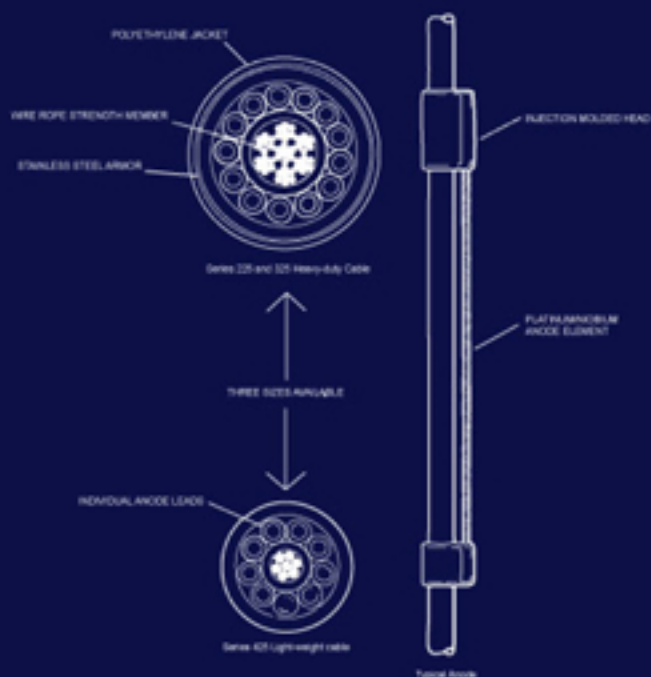
Since 1997, Galvotec has been the exclusive distributor of Lockheed's marine cathodic protection systems to the oil and gas industry. The Lockheed Galvotec-Vertical Tension Anode (VTA) system is the only proven cathodic protection system installed without the use of divers and their costly support vessels and equipment. This system has been successfully installed in water depths in excess of 120 meters from the surface and with ROV assistance to depths greater than 250 meters. Large savings in installation costs are realized and many systems with 20 year lives have been installed and met their design life requirements.

In the 1970's Lockheed developed and patented the Vertical Tension Anode system as a cathodic protection retrofit technique for offshore platform jackets that are generating on-site power. The generators power the rectifiers that provide current to this anode system. The system incorporates a custom manufactured armored tension cable containing multiple anodes molded on and anchored on the sea floor via a concrete weight. This vertical anode string is tensioned off to a point above the water line therefore restricting its lateral movement to a small deflection envelope. Topside termination allows the individual anode power cables to be tied into the rectifier(s) to facilitate individual anode monitoring and control.



Lockheed-Galvotec Vertical Tension Anodes

The anodes are made of platinum that is welded to a niobium substrate developed by Lockheed. Each anode is custom manufactured in length and anode area so each anode discharges the same amount of current regardless of its location on the VTA string. This anode has been used to protect numerous ships and submarines of the US Navy as well as protecting the cooling water intakes of nuclear power plants and many offshore platform jackets. This proven technology is the only offshore impressed current retrofit system that has over 40 years of proven offshore platform experience. It is designed to withstand 100 year storms.



For more information and pricing, please contact:

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