Cortec® Offers Environmentally Friendly Preservation System for Ship Owners and Operators Facing Pandemic Challenges

With the outbreak of COVID-19, a new economic landscape has appeared on the maritime scene. Demands for shipping services from tankers, bulkers, container ships, and cruise lines have dropped as one nation after another has been impacted by the pandemic, setting supply and demand forces askew globally. In the midst of falling revenues, ship owners and operators also face the question of how to preserve the value of idle vessels exposed to extremely corrosive marine environments.

Cortec® Corporation is working hard to ease the pain and simplify decision-making with a practical layup guide that helps the shipping industry hope for the best while preparing for the worst. Cortec’s guide to “Long-Term Storage of Ships” draws upon the advantages of VpCl® Technologies to provide techniques that are user friendly, effective, and minimize the time and labor needed to return vessels back to service when the crisis ends.
distinct advantage in this preservation plan by their ability to vaporize and form a molecular protective layer on all metal surfaces within a void space. The molecular layer serves as a barrier to oxygen and electrolytes and breaks the corrosion cycle, providing uniform corrosion protection inside rudders (VpCI®-609/VpCI®-308), boilers (Boiler Lizard®), and electrical/electronic control cabinets (VpCI®-101/105/111 Emitters). Incorporated into oil and fuel additives, this technology can be applied to gearboxes (M-531) and fuel tanks (VpCI®-707) to provide corrosion protection both above and below the surface of the fluids. Vapor phase Corrosion Inhibitors can even be used to protect against insidious CUI (corrosion under insulation) by injecting VpCI®-658 into insulation.

VpCI® coatings such as EcoShield® 386 (permanent), VpCI®-395 (permanent), and VpCI®-391 (removable) offer corrosion protection by direct application to metals such as guard rails, decks, and a variety of exposed machined surfaces above and below deck. VpCI® Super Penetrant serves as a good protective lubricant to spray on valve stem bushings, while ElectriCorr® VpCI®-239 is ideal for creating a protective corrosion inhibiting film on electrical contacts. VpCI®-645 is yet another corrosion inhibitor, which Cortec® recommends for fogging into ballast tanks or adding to saltwater cooling water systems.

Cortec's ship layup guide also includes solutions for odor control in toilets and holding tanks. ECO-SEPT™ and PORTA-TREAT™ are two biological treatments produced by Bionetix® International, Cortec's biotechnology subsidiary. ECO-SEPT™ contains a diverse microbiology designed to activate digestion of solid waste in greywater or black-water tanks for kitchen and restroom waste. It works to improve pipe purification and controls methane production while breaking down waste. PORTA-TREAT™ 10X contains a safe, non-formaldehyde formula specially designed to treat and deodorize portable toilets and mobile systems aboard vehicles. In liquid form, it can be automatically injected. ECO-CLEAN-ALL™ is an excellent biological cleaner for general cleaning of hard surfaces such as kitchen walls and floors, emptied pools, or other hard surfaces not in direct contact with food.

Cortec's long-term storage guide shares typical dosage and/or protection volume for a variety of products, general application procedures on a broad range of shipboard components, and recommendations on cleaning and rust removal for good surface prep. It also notes specific products that have been approved or used by significant OEMs or marine entities. Those who want to visualize how VpCI® translates into real-life applications may review the guide's accompanying presentation to see images and examples of Cortec® VpCI® products used in a Croatian shipyard.