

Eco-friendly tank coating hits the market

More than 600 ships have now been treated with Advanced Polymer Coatings (APC) patented MarineLine tank coating.

The number is expected to climb in the coming months, as new coatings advancements are introduced and coatings contracts are signed, APC said.

APC has recently developed a new 'eco-friendly' MarineLine 784 formulation with added performance benefits.

MarineLine 784's VOC level has been reduced to only 30 grams per litre, which is the lowest level of any other cargo tank coating, the company claimed.

This new coating formulation can be sprayed using several methods. The first method uses plural component equipment to separately hold the coating components (resin and catalyst) until spraying occurs. This reduces waste and eliminates the need for added solvent.

Another method - airless spraying - can be used after adding in a recommended amount of non-VOC solvent to the coating prior to application. APC said that it is trying to lead the maritime industry into using more advanced spray technologies used by other industrial markets.

Methanol resistant

A key performance feature of new coating is its ability to resist Methanol up to 50 deg C. This is a growing need by shipowners and operators, especially carrying Methanol in the Middle East region, where temperatures can escalate. This is made possible because APC has engineered even tighter crosslinking in MarineLine 784's ladder-like structure, with very small openings between the rungs. This is far superior to the large openings of Phenol Epoxy coatings, the company said.

When cured, MarineLine 784 is virtually impenetrable by preventing even very small chemical molecules from entering into the polymer structure. With over 600 chemical

and product tankers coated with MarineLine, this is the only proven high performance cargo tank lining that withstands all IMO approved chemical cargoes, APC said.

The new coating provides more chemical resistance than stainless steel and phenolic epoxies, with superior resistance to acids, alkalis and solvents, such as Methanol.

APC is also marketing its patented GuardLine cargo tank coating. This 'low temperature cure' tank coating is offered at a lower cost than MarineLine, as the coating does not require heat curing.

This provides shipowners and operators with a choice of MarineLine 784 — for higher level chemical service, or GuardLine — for its ability to carry less severe cargoes, such as CPP, bio-fuels, vegetable and edible oils and DPP.

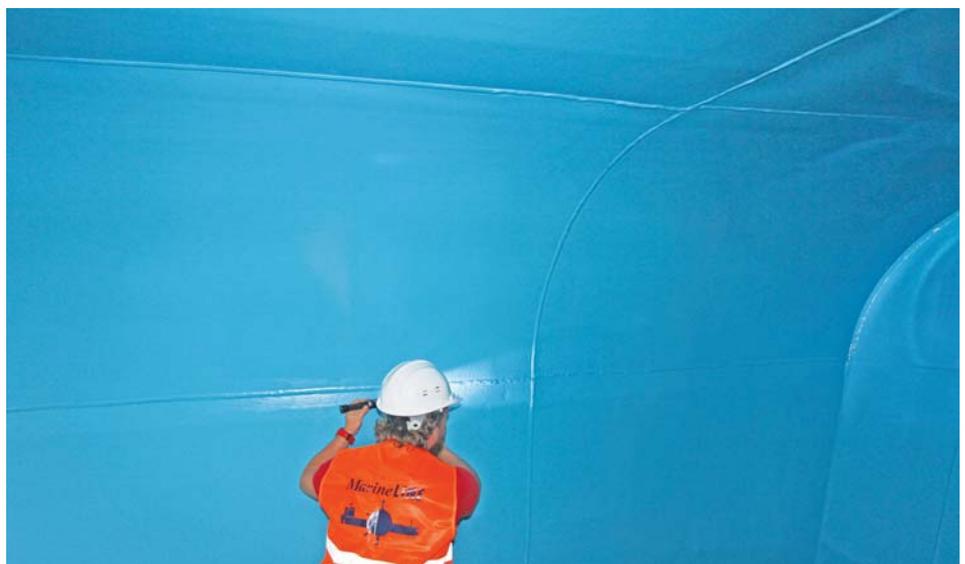
APC claimed that GuardLine's unique advantages are greater versatility and chemical resistance than any Phenolic Epoxy,

or Zinc, coating on the market today, but at a cost that is comparable to these coatings.

GuardLine, with its distinctive blue colour, only requires an ambient cure at +25 deg C (+77 deg F) to achieve high service capability. This tank coating is also engineered with an eco-friendly ultra low VOC formulation and can be applied by plural component, or airless spray equipment.

Because of the broad versatility of both coatings, APC said that it is now working on several vessels and signing contracts for others. Currently, a multi-vessel tank coating project is underway at YARDIMCI Shipyard in Tuzla, Turkey, which is using GuardLine cargo tank coating for product tankers under construction for Palmali Shipping.

In addition, APC is working with a number of shipowners and shipyards on new contracts for 2015 and beyond, the company said.



An APC inspector checks the application of the GuardLine cargo tank coating at the YARDIMCI Shipyard in Turkey on a newbuild Palmali Shipping vessel.