



■ With a projected 6000 ships in lay up over the next few years hull fouling could be an expensive problem

Laid up, fouled up

SW&S considers the impact of lay up on hull coatings

Marine organisms are going to be spoilt for choice with the projected 6000 ships in lay up over the next few years providing temporary accommodation; but what type of hull coating system will best deter these aquatic critters?

Silicone-based foul release technologies might have the edge on biocidal-type self polishing copolymers and controlled depletion polymers since they mitigate the need for dry docking after the lay up period; although this does depend on the location and the length of time the vessel is static. (For instance, polar regions where sea temperatures are below -5°C have the lowest risk of fouling, whereas more temperate zones, where temperatures are 5 to 20°C or more, will see fouling occur throughout the year.)

According to International Paint's John Willsher, all vessels static for more than 12 months will almost certainly require dry docking, but silicone based coatings offer more options because hulls coated with these systems can be more easily and frequently cleaned underwater during the lay up period without impediment to the coating. Some biocidal coatings, on the other hand, may be damaged if their hulls are frequently cleaned.

During a presentation Willsher gave in London recently, he claimed that biocidal-type antifouling has limited performance on stationary objects – an issue for long-term lay-up – and that once the maximum coating lifetime has been reached fouling can be rapid, greatly reducing the visibility of underwater structures making inspections much harder to carry out. What's more, he says, once fouling has occurred, underwater removal is extremely difficult and expensive and can also damage the underlying anti-corrosive coating.

Conversely, foul release systems are said to have 'excellent' static fouling resistance with a reduced hull cleaning requirement – a claim not unwarranted given that Exmar Ship Management selected Intersleek 900 for the EBRV *Excellence*, a vessel whose operational remit requires it to be stationary and on station for months at a time. Indeed, some vessels applied with the paint have required little maintenance and cleaning after being static for well over 200 days.



■ Regular underwater hull cleaning may pose a significant environmental challenge, especially in US waters

water-based polymer chains that are super absorbent and highly flexible. These unique polymeric polymers are added to the other components of the