

Professor says latest-generation coatings send a strong message

A new coating technology available to most owners and operators today offers great

scope to reduce fuel consumption and pay for itself in less than a year, according to a leading shipping academic. Professor Ian Buxton of Newcastle University's School of Marine Science and Technology, writing in the latest issue of International Paint's (IP) Propeller magazine, says that IP's Intersleek 900 offers shipping companies scope to save money in both the short and long-term whilst also improving the environmental efficiency of their ships. Such a move, he says, also sends a strong message to the critics of shipping who run down its environmental performance.

The patented fluoropolymer foul release coating, introduced to the market little more than a year ago, is exceeding all expectations, according to IP, which points out that climbing bunker prices raise the level of potential savings and reduce the payback period. Intersleek 900 improves on the performance of even the best silicone-based systems, the company says, with any attached fouling washed off as the ship gets under way, and without any biocide release.

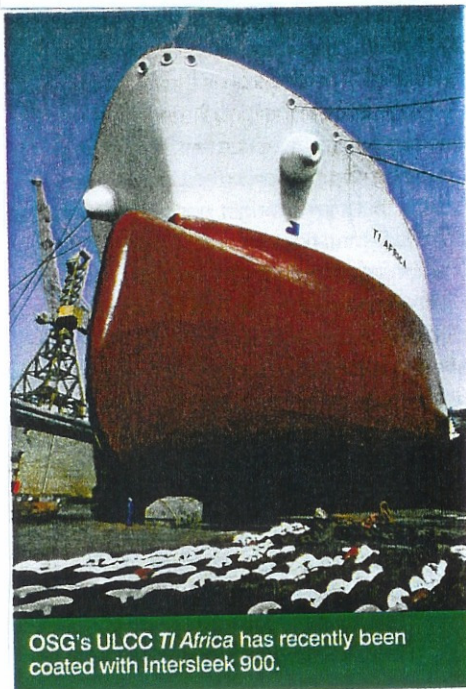
Moreover, unlike silicone-based paints, it can be used on all ships sailing at speeds of more than 10 knots. IP has therefore potentially opened up a vast new market of conventional cargo ships, including bulk carriers and tankers.

The Professor believes that the shipping industry could do more to get positive messages across to the world's public at large. Hull coatings, he says, offer significant potential. "Shipping cannot be seen to be doing too little too late," he declares. "It should make the most of its environmental initiatives in a way that is easily understood and accessible to the general public."

Professor Buxton points out that there is a significant amount of misinformation put out on environmental pollution from ships, which is often not questioned by the media. "That it is not always challenged is partly, it must be said, because shipping does not tell its success story very well," he comments. As an example, he points to an article published recently in a leading UK newspaper in which it was claimed that ships pollute more than aircraft, but confused the amount per vehicle (where a ship carries a thousand times the payload of an aircraft) with the amount per tonne moved.

Furthermore, the article suggested that more efficient engines burn thicker fuel and therefore emit more pollution. However, modern diesels emit far less pollution than they did, and engine manufacturers are striving constantly for further reductions in SOx, NOx and particulate emissions. But ships are rarely seen by the world's public and few appreciate that life as we know it would not be possible without the cargo ships which successfully transport more than 95% of the world's trade.

So far as specific savings are concerned, Intersleek 900 affords extra fuel savings as compared with Intersleek 700, IP's premium silicone product. This itself offers fuel reductions of around 6% as compared with



conventional self-polishing copolymer paints, according to IP. But actual in-service figures for Intersleek 900 indicate that some companies have recorded fuel savings and emission reductions of more than 10% using the latest hull coating.

With bunker prices now typically in excess of \$500 a tonne and still climbing, the economic become even more irrefutable. Do the 'spend to save' calculations, suggests the Professor, who points out that the new coating is highly durable, reducing the need for applications in future, whilst roughness increases less with age. "Owners can declare speed and fuel consumption figures to charterers with greater confidence, knowing that unscheduled drydockings are unlikely to be needed to restore performance," he says.

In conclusion, Professor Buxton points out that recoating with Intersleek can enable superintendents to be seen as money savers rather than money spenders. And the payback on such a move aboard a wide variety of vessels will convince the most conservative of finance directors, he says. But more than that, it will also send a very powerful message to shipping's critics and the world's public at large.

International scores a century with 900

K-Line's 77,477 dwt thermal coal carrier *Corona Emblem* is the hundredth vessel to have her hull coated with International Paint's (IP) Intersleek 900. The 13-knot vessel, the latest in a series of applications by the Japanese owner, had her hull coated during a recent docking in China.

The latest generation coating, based on patented biocide-free fluoropolymer foul release technology, has already attracted the attention of a range of leading ship owners and operators. But a list of the first hundred applications, published recently in IP's Propeller magazine, also demonstrated the

diversity of the vessel types to which Intersleek 900 has now been applied.

IP's Jim Brown, Marketing Operations Manager, points out that unlike silicone-based hull coatings which are designed for 'high activity' ships such as container vessels, high-speed ferries and gas carriers, the vast majority of standard cargo ships can benefit from the fuel savings resulting from an Intersleek 900 application. In fact, he says, the benefits are available for all ships sailing at speeds of more than 10 knots.

Applications so far range from some of the fastest container ships in service today, to some of the largest tankers afloat; and from Capesize bulk carriers to small tankers, with gas ships, vehicle carriers, cruise liners and anchor handlers all in there too. With in-service fuel savings running into double figures, it is no wonder that Intersleek 900 is catching the attention of owners and operators whose rising fuel bills are a growing headache. A 10% saving on a typical multipurpose vessel burning 30 tonnes a day soon mounts up – running into tens of thousands of dollars in just one typical operating month. But for larger and faster ships, the potential savings are obviously far more substantial. And with fuel costs representing the largest-ever component of running expenses, more and more operators are thought likely to assess the latest hull coating options.

Container lines so far opting for the new coating include CMA CGM, Cosco, Dobson, Hapag Lloyd, MSC and Yang Ming. Tanker and gas carrier operators include BW Gas, Exmar, OSG, Shell and Vela. And cruise lines including Royal Caribbean, Carnival, MSC Cruises and Holland America Line have also chosen the new coating. Other owners who have applied Intersleek 900 so far include NYK, Wilh Wilhelmsen, P&O Ferries, China Navigation and Hoegh. The new coating has also been applied to the hulls of naval vessels belonging to the navies of the Netherlands, Spain and the US.