

Marine Coatings Market

Growth in the marine coatings market can be attributed to a surge in new building in the Asia-Pacific region, as well as high demand for exported goods from the region.

By **TIM WRIGHT**
EDITOR

Marine coatings systems are applied to ships and structures in both the sea and fresh water environments. They serve the dual purpose of protecting against deterioration and keeping ships looking good. The world merchant fleet is comprised mostly of bulk carriers and tankers, but also includes container ships, cargo ships and passenger/cruise ships among others. In terms of value, the marine coatings market was worth approximately \$4 billion in 2007, or roughly four percent of the total global coatings market, on a volume of 840 million liters.

According to IPPIC's "Global Paint and Coatings Industry Market Analysis Report (2007-2012)," the growth of marine paints is projected to slow and level off over the next five years and will be worth \$4.7 billion in 2012 on a volume of 904 million liters.

The global marine coatings market is heavily consolidated, the IPPIC report said, with 80% of the market owned by five companies—AkzoNobel, through its International Paint business, Chugoku Marine Paints, Hempel's Marine Paints, Jotun and PPG.

Asia-Pacific dominates the global distribution of marine coatings for both new ship builds and maintenance and repair. China is fast becoming the world's largest shipbuilding nation and has set a goal of becoming number one in the industry by 2015. In 2007 the order books at Chinese shipyards surpassed those of Japan to be second only to South Korea. In terms of new orders, China was actually number one in 2007, totalling 98.5 million deadweight tons, or 42% of the global total, according to the Beijing government.



Conard Line chose International Paint's fluoropolymer foul release coating Intersteek 900 for the underwater hull of its transatlantic ocean liner Queen Mary 2.

In terms of regional distribution of marine coatings, the IPPIC report said Asia-Pacific accounts for 56% of the market followed by Europe with 24%, North America 8%, Latin America <1% and ROW markets 12%.

Coatings World discussed market trends and issues with experts at two leading marine paint manufacturers—Jotun and International Paint.

Coatings World: How did the marine coatings market perform in 2008? What are your expectations for 2009 and beyond and how is the global financial crisis impacting the marine coatings market?

Jim Brown, marketing development manager, International Paint: Looking at 2008, currency headwinds and raw material price escalation were key fac-

tors in the first half of the year. A particular issue for us was the volatile price of copper and zinc—key raw materials used in antifouling and anticorrosive primers. Despite this, 2008 was a good year with sales volume growth being achieved for the fourth year in a row.

For 2009, we're seeing continued volatility in raw material prices but exchange rate differentials can, if sustained, work in our favor. It is inevitable we will be affected by the global downturn and there is concern over visibility in the maintenance market and the new-building orderbook post 2010 but measures are in place to ensure we're able to maximize opportunities and take advantage of the upturn when it arrives.

Morten Eikenes, group category manager antifouling, Jotun Coatings: The marine coatings market in 2008 per-

formed in general very well. Even though 2008 ended in financial turmoil this did not affect the market for marine paints for maintenance before November/December. The number of new builds that are cancelled and the general reduction in new projects will eventually lead to less activity by the end 2009 and into 2010.

Our best understanding of the market for marine coatings is that a lot of vessel owners must focus on cash flow and their liquidity. As a result of this there will be a shift from premium products to low cost products and/or application of less paint (i.e. shorter DD intervals). On the other hand those that have their fleet on contracts may be more aware of the opportunities for savings in their bunker bill that lays in the upper premium antifouling products.

CW: How have rising raw material prices impacted the marine coatings market? Have you been able to pass along price increases to your customers?

Broun: Rising raw material prices have had a large impact on the marine coatings market in recent times. Large increases and inflationary pressures seen in the global economy during 2008 have increased the cost of coatings manufacture. Despite published falls in commodity prices experienced recently the market remains volatile and is showing year on year increases in key raw material prices. As a company we strive to minimize price increases to our customers by employing various techniques such as forward purchasing of key commodities and benchmarking activities. As many of our customers have pricing contracts in place we have absorbed much of these increases ourselves, but have been forced to implement increases across the market.

Eihenes: The last few years we experienced significant increases in raw material cost. The prices on zinc and copper had almost a threefold increase, which has been a challenge for the coating suppliers. We have not managed to increase the prices to fully compensate increased cost.

CW: How has recently enacted environmental legislation such as the IMO's antifouling treaty and the Biocides Product Directive in EU affected the global marine coatings market?

Broun: The coatings industry is heavily regulated and we're controlled in many ways. In Europe for example, REACH is a new regulation on chemicals and their safe use. It deals with the registration, evaluation, authorization and restriction of chemicals, which for us means we can only use registered raw materials in our coatings.

The SED, Solvents Emissions Directive, regulates VOC emissions from facilities such as shipyards. This means we have to produce coatings, which have less solvent or are water-based.

We're also regulated by the BPD, the Biocidal Products Directive, where all biocides used in antifouling paints need to be evaluated and approved before they can legally be sold.

In the US, there are also a series of regulations governing the substances we can use in our products together with rules for VOCs and biocides. We are also now seeing new countries regulating in these areas such as Hong Kong where rules regarding VOCs are about to be introduced.

For our customers, there are two main areas of coatings legislation that have had a significant impact and I believe both have been beneficial. Firstly, the Control of Harmful Antifouling Systems on Ships, where from January 1, 2003 an International Maritime Organization (IMO) convention established a ban on the application of tributyltin (TBT) antifouling on ship hulls and from January 1, 2008 an end to the presence of TBT on ships hulls altogether. The convention entered into force on September 17, 2007.

Secondly, The SOLAS Performance Standard for Protective Coatings for dedicated seawater ballast tanks in all types of ships and double-side skin spaces of bulk carriers. Again I believe this is beneficial and welcome the introduction of a standard that will help increase the service life of coatings and ultimately crew and vessel safety.

Eihenes: In general we welcome environmental legislations. For instance the BPD in the EU has created an environment where biocides that are not well documented are more or less phased out of the market. All major suppliers are following this legislation. However, an increase in bureaucracy has been a consequence of this, which in turn has influenced negatively on innovations.



With three vessels already coated and more specified for application this year, Wightlink Ltd, a UK-based ferry company have firmly adopted International Paint's fuel release coating system, Intersteak 900 fluoropolymer fuel release coating. They selected Intersteak 900 for the vessels FastCat Hyde (shown in the picture), Our Lady Pamela and FastCat Shanklin were respectively drydocked. The vertical sides of all three vessels were coated with Intersteak 900. The product has since provided cost benefits to the owner, including improved fuel consumption, reduced CO₂ emissions and a reduced requirement for slipping.