

Splash of paint can save tons of fuel

WHILE gas-guzzling airlines have borne the brunt of criticism from environmentalists as they wage war on climate change, ship operators are also under pressure to clean up their act.

In the shipping lanes which straddle the globe, from the South China Sea to the frozen North, seafarers are becoming increasingly aware of their impact on the planet.

And in the battle to curb fuel consumption and CO2 emissions, thousands of ship owners have turned to the expertise of North East scientists for help.

On the south bank of the Tyne sits Gateshead's largest private sector employer, the International Paint plant owned by industrial juggernaut Akzo Nobel.

Within the walls of the sprawling factory, the endeavours of the men and women in white coats continues to play a major role in saving the planet by developing special paints for use on the high seas.

Since the mid-70s International Paint has been at the forefront of anti-fouling technology which saves huge levels of

Andrew Mernin finds out how scientists on Tyneside are cleaning up the high seas

fuel by preventing marine life from attaching itself to the hull of ships.

According to International Paint, if ships didn't use anti-fouling coatings, fuel consumption would increase by as much as 40%.

Meanwhile the company estimates that anti-fouling coatings provide the shipping industry with annual fuel savings of £18.4bn and reduced CO2 emissions of 450 million tonnes.

Marketing operations manager Jim Brown said: "For shipping, fuel efficiency and environmental impact is an area where fouling control coatings have and will continue to have a significant role."

"With an estimated 350 million tons of fuel consumed annually by the world's fleet, there is an ever-increasing focus on shipping's environmental footprint."

And the success of International Paint, which is making waves with its

biocide-free foul release Interleek product, has firmly established Felling on the global radar of sea-dogs all over the world.

Paints developed by scientists on Tyneside have been applied to 38,000 ships, representing over one billion deadweight tonnes, 5,000 ship owners in ports in 150 countries.

Last month the company welcomed a visit from a Chinese government delegation as part of the United Nations Development Program (UNDP).

China is striving to eradicate the use of polluting substances in anti-fouling coatings used by fishing vessels and officials were keen to learn from the expertise available at the Felling plant.

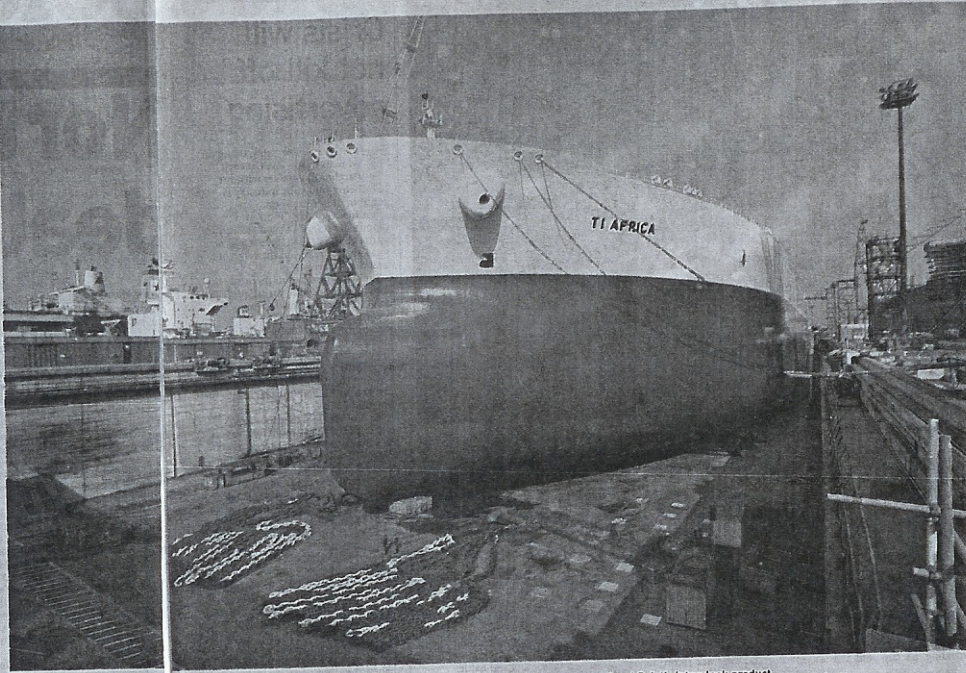
Julian Hunter, product regulatory affairs manager, said: "In China anti-fouling paints applied to small fishing boats are typically manufactured and supplied by small local firms."

"These suppliers do not have expertise in evaluating the safety of products and in some cases products containing environmentally damaging substances are used in paints applied to fishing boats."

"The Chinese government and the international community became aware of this last year and the United Nations allocate a grant to China to remove these products from the market and replace them with more environmentally-friendly alternatives."

The Chinese delegation looks set to be followed by other international visits to the North East as shipping firms come under increasing pressure to meet tighter fuel efficiency targets.

In the meantime the company is looking to step up its presence in the Asian market with the news last week of a new development laboratory in Singapore.



ROBOT CLEANER MAKES WAVES

GATESHEAD'S International Paint workforce is not the only scientific team helping to save the marine environment by cleaning up ships.

Newcastle University has attracted international interest for the Hismar robot, which has been developed to remove slime, underwater plants and sea creatures from the hull of ships.

The robot, which is able to navigate itself across the ship's hull, boosts fuel efficiency and stops living organisms from one part of the world being transported to another by vessels.

According to its creators, there is commercial interest from sources in Australia and New Zealand, where government authorities are increasing pressure on shipping firms to reduce their carbon footprint and impact on marine ecosystems.

The EU-funded technology has also caught the attention of several companies in Europe, including one from Poland, and recently attracted representatives from the US Government's Office of Naval Research in London to the region for a fact-finding visit.

SCIENCE OF THE SEA The Africa ship, one of the four largest tankers in the world, has been treated with International Paint's Interleek product.