

Grimaldi achieves significant fuel savings with Hempaguard[®] and Hempasil X3

When the Grimaldi Group decided to move towards more energy-efficient and greener operations, reducing fuel consumption from its vessels was the obvious place to start. The company has applied our silicone hull coatings to more than 30 vessels, and has recorded significant reductions in fuel bills and associated CO₂ emissions as a result.

A multinational logistics group specialising in cargo and passenger transport, the Grimaldi Group operates a fleet of over 100 vessels. As part of its programme to reduce both operating costs and emissions, the Group has applied Hempasil X3 and/or Hempaguard X7 to a large number of freighter-cruisers, roll-on/roll-off ferries, car carriers and passenger ferries since 2011.

According to Grimaldi, the use of silicone hull coatings such as Hempasil X3 has resulted in significant fuel and emissions savings. Grimaldi Group owner Manuel Grimaldi has confirmed that the Group will continue to follow a 'green profile', and sees silicone hull coatings as an important aspect of this'.

"Reducing energy consumption not only means ships pollute less; it also makes commercial sense as we can cut down on our costs. To this end, last year we announced the creation of a Corporate Energy Savings Department. This year, in a sign of our long-term commitment, we invested over EUR 100 million in green refitting technology including silicone paint."

Taken from Grimaldi News 64, December 2013

Grimaldi achieves significant fuel savings on multiple vessels with Hempasil and Hempaguard

Hull coatings with a fuel-saving guarantee

When fouling organisms, such as barnacles and biological slime, attach to a vessel's hull, the extra drag they create means more fuel is needed to move the ship – which significantly increases fuel costs and CO2 emissions.

To combat fouling, Grimaldi has coated 16 vessels with our Hempasil X3 since 2011. Hempasil X3 uses a combination of hydrogel technology and silicone. The silicone gives the hull a smooth non-stick surface, while the hydrogel makes the vessel's hull appear as liquid to fouling, so the organisms do not attach.

Then in 2013, we released Hempaguard X7, an advanced fouling defence coating based on Actiguard® technology. Grimaldi was quick to make the change, and applied Hempaguard X7 to seven vessels in just one month. Our team of coating advisors worked closely with the Grimaldi Group throughout the project, from initial specifications to final application on each vessel, to ensure a fast and efficient coating process.

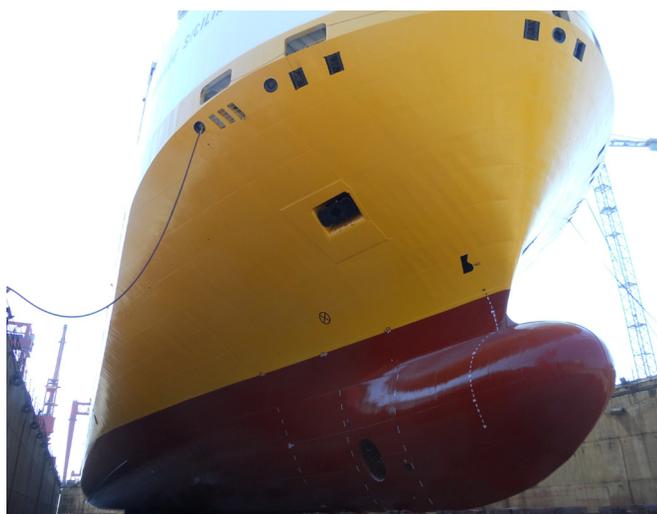
Hempaguard X7 promises to have the most significant impact on vessel fuel consumption – and associated CO2 emissions – of any hull coating for many years. The only product of its kind to come with a Customer Satisfaction Guarantee, Hempaguard X7 uses an advanced combination of hydrogel-silicone and an efficient fouling preventing biocide to deliver sustained fuel savings over the entire docking interval, even if the vessel experiences long idle periods or changing trading patterns.

A best-in-class technology, Hempaguard X7 reduces fuel consumption and associated CO2 emissions by 4-8 per cent in the first year. However, as demonstrated by Grimaldi, actual fuel reductions can be significantly higher.

About the Grimaldi Group

Headquartered in Naples, Italy, the Grimaldi Group comprises eight main shipping companies, including Atlantic Container Line, Malta Motorways of the Sea, Minoan Lines and Finnlines. The Group provides transport services for rolling cargo and containers between North Europe, the Mediterranean, the Baltic Sea, West Africa, and North and South America. It also offers passenger services within the Mediterranean and Baltic Sea.

The shift to silicone coatings is part of the Grimaldi Group's long-term commitment to improve its environmental performance. The Group has begun a number of initiatives to reduce energy use that should generate significant fuel savings. The Grimaldi Energy Saving Technical Department has declared that it is fully satisfied with the performance of Hempaguard X7.



A few numbers

- 35 vessels coated (so far)
- 120 Hempel coating advisors involved
- 138,000 litres of Hempadur Quattro applied
- 53,560 litres of Hempasil Nexus applied
- 34,460 litres of Hempasil X3 applied
- 35,240 litres of Hempaguard X7 applied

The Hempel Group Head Office

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Grimaldi vessels coated with HEMPASIL X3 or HEMPAGUARD X7				
Vessel	Silicone system	GT	DD date	Where
Grande Marocco	Hempaguard X7	47.635	jan-16	Alcegiras
Grande America	Hempaguard X7	56.642	jan-16	Gibraltar
Zeus Palace	Hempaguard X7	26.995	jan-16	Malta
Grand Benelux	Hempaguard X7	37.700	aug-15	Yalova
Eurocargo Patrasso	Hempaguard X7	26.536	jul-15	Napoli
Grande Amburgo	Hempaguard X7	56.738	jul-15	Septubal
Eurocargo Trieste	Hempaguard X7	26.536	jun-15	Napoli
Grande Ghana	Hempaguard X7	47.115	feb-15	Yalova
Grande Senegal	Hempaguard X7	47.300	feb-15	Alcegiras
Euroferry Egnazia	Hempaguard X7	33.400	dec-14	Yalova
Grande Ellade	Hempaguard X7	47.115	sept-14	Malta
Grande Costa D'Avorio	Hempaguard X7	47.218	sept-14	Yalova
Grande Angola	Hempaguard X7	47.115	sept-14	Gibraltar
Grande Colonia	Hempaguard X7	41.900	sept-14	Tuzla
Grande Italia	Hempaguard X7	37.700	sept-14	Yalova
Grande Anversa	Hempaguard X7	38.700	sept-14	Tuzla
Grande Scandinavia	Hempaguard X7	52.485	aug-14	Malta
Grande Congo	Hempasil X3	47.635	feb-14	Alcegiras
Grande Gabon	Hempasil X3	47.635	jan-14	Alcegiras
Grande Roma	Hempasil X3	44.408	jan-14	Tuzla
Euroferry Olympia	X3 On Fb; X7 On Vs	32.682	dec-13	Malta
Grande Togo	Hempasil X3	47.218	oct-13	Falmouth
Grande Sicilia	Hempasil X3	38.651	aug-13	Yalova
Eurocargo Bari	Hempaguard X7	32.632	aug-13	Yalova
Grande Benin	Hempasil X3	47.300	aug-13	Falmouth
Grande Guinea	Hempasil X3	47.658	jul-13	Gibraltar
Grande Brasile	Hempasil X3	56.650	feb-13	Malta
Grande Amburgo	Hempasil X3	56.650	jan-13	Malta
Grande Marocco	Hempasil X3	47.635	jan-13	Alcegiras
Grande Portogallo	Hempasil X3	37.700	sept-12	Yalova
Grande Napoli	Hempasil X3	44.408	sept-12	Tuzla
Grande Spagna	Hempasil X3	37.700	sept-12	Yalova
Grande Detroit	Hempasil X3	38.651	aug-12	Yalova
Zeus Palace	Hempasil X3	26.995	dec-11	Napoli
Grand Benelux	Hempasil X3	37.700	nov-11	Yalova

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