International®

Intersleek®7180

Reducing hull roughness for vessel efficiency.

AkzoNobel

A smoother hull helps red and greenhouse gas emis

The economic importance of underwater hull condition cannot be understated, any increase in hull roughness can result in a significant rise in vessel operating costs.

Fouling control coatings help to maintain smooth, clean hulls by preventing fouling on the underwater hull and minimising hull roughness, achieving energy efficiency and reducing operational, commercial and environmental costs.

Intersleek® foul release technology, works by providing a very smooth, slippery, low friction surface onto which fouling organisms have difficulty attaching. Any which do attach, normally do so only weakly and can usually be easily removed.

The latest innovation to complement the Intersleek® range, Intersleek®7180 Linkcoat, now allows all ships to access our groundbreaking fluoropolymer based Intersleek®900 and silicone based Intersleek®700 foul release technology, without the expense of full underwater hull blast cleaning.

Intersleek®7180 Linkcoat has been especially designed for direct application over existing traditional antifouling technologies, self polishing copolymers (SPCs), self polishing antifoulings and controlled depletion polymers (CDPs) to deliver the technical, commercial and environmental benefits of Intersleek® technology.

uce fuel costs
sions

Application of Intersleek®7180 Linkcoat followed by the full Intersleek® scheme can significantly reduce the surface roughness of an existing antifouling by over 70%*, resulting in a smoother hull.

Based on specialised dual-cure technology (DCT), Intersleek®7180 Linkcoat promotes adhesion to a wide range of existing antifouling surfaces. An initial fast cure provides excellent drying and barrier properties whilst a secondary cure, utilising flexible polymer chemistry, enhances adhesion. Intersleek®7180 also fills in and levels out the rough surface of the existing antifouling to provide the basis for a smooth finish that is almost as good as the system being applied to a fully blast cleaned surface.

Economically, Intersleek®7180 Linkcoat provides a logical choice for ship operators looking to reduce costs. Compared to a full blast and full scheme application, savings are estimated at over USD 450,000**, through shorter times in drydock, reduced surface preparation and application costs.

With proven in service performance, all backed up by a wealth of technical service knowledge in Linkcoat application, Intersleek® provides options for all vessel types and is part of our new generation of ‘coatings that care’, helping to reduce the shipping industry’s overall carbon footprint.

* By applying Intersleek®7180 followed by the full Intersleek® scheme
** For a typical VLCC vertical sides application

Intersleek®7180 Linkcoat is supported by more than 10 years experience of applying Linkcoats on more than 175 vessels, covering over 2 million square metres. Intersleek®7180 Linkcoat technology now enables operators of all vessel types to upgrade to the premium Intersleek® foul release coatings.

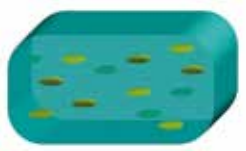
Intersleek®7180

Dual Cure Technology

Intersleek®7180 uses a specialised dual-cure technology (DCT) - a combination of:

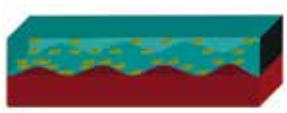
- Epoxy-amine cure to give excellent drying and barrier properties
- Secondary cure using flexible polymer chemistry which enhances adhesion to a range of different antifouling surfaces

The special properties created by DCT start working immediately



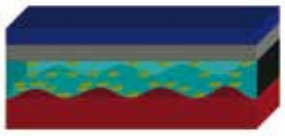
Upon mixing

When components are mixed together, both reactions start immediately creating distinct phases.



During application

When applied over an existing biocidal antifouling, the phases migrate to the surface and enhance the adhesive strength



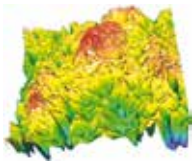
In-service

Filling-in the rough surface of the existing antifouling gives a smooth finished surface almost as good as full blast

Reducing Surface Roughness

By applying Intersleek®7180 Linkcoat followed by the full Intersleek® scheme, the surface roughness of the biocidal antifouling can be significantly reduced producing a smoother hull. This is demonstrated by following the Intersleek® scheme application using highly accurate laser profiling:

In-dock condition of antifouling after high pressure fresh water washing

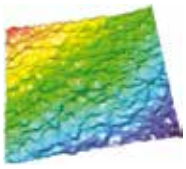


Typical roughness 300-350µm

Intersleek®7180 Linkcoat applied by airless spray to 100µm dry film thickness

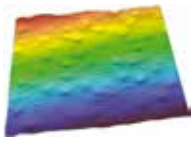
Typical roughness 200-255µm

Intersleek®7180 Linkcoat and Intersleek® tiecoat applied. Total new dry film thickness of 200µm



Typical roughness 125 - 175µm

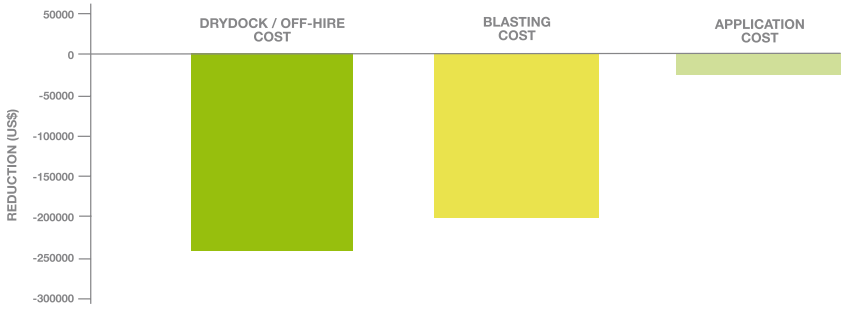
Intersleek® Linkcoat scheme completed with application of finish coat. Total new dry film thickness of 350µm



Typical roughness 80-100µm

Reduction in Costs Compared to Full Blast

Using Intersleek®7180 Linkcoat, initial investment savings of around 30% can be achieved compared to full blasting. Example: 18,000 m^2 vertical sides only on a Very Large Crude Carrier (VLCC) would save in the region of $450,000



Intersleek® Linkcoat application

In-dock condition after HPFWW

Application of Intersleek® Linkcoat

Intersleek® tiecoat being applied

Completed Intersleek® scheme

To find out more visit: www.international-marine.com

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International

Intersleek®7180

Linkcoat for Intersleek® foul release systems

Product Description

A two pack Linkcoat for foul release systems. Allows the application of Intersleek®700 and Intersleek®900 foul release systems over a wide range of existing biocidal antifouling technologies, including Self Polishing Copolymers, Self Polishing Antifoulings, Duplex Schemes and Controlled Depletion Polymers. Suitable for use at Newbuilding or Maintenance and Repair.

Features	Benefits
Compatible with a wide range of biocidal antifouling systems	Control of conversion to Intersleek® systems Improved vessel efficiency through excellent fouling control and smooth hull
Removes requirement for full blasting	Reduction in surface preparation & expense of full blast Reduced time in drydock Less waste disposal
Smoother hull	Creates a smooth surface lowering the hull roughness and improving vessel efficiency
Acts as a barrier to prevent biocides leaching from existing antifoulings	Freedom from future biocide restrictions

Product Information

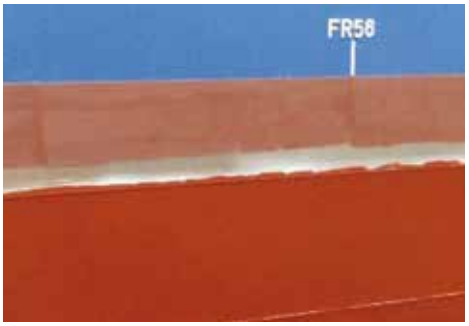
Colour	BXA727 Red Brown
Surface preparation	HPFWW to remove leached layer
Volume solids	56% ±2% (ISO3233:1998)
Typical film thickness	100 microns
Hard dry	9 hours @ 25ºC
Minimum application temperature	10ºC
Method of application	Airless Spray, Brush, Roller

For each of our products the relevant Product Data Sheet, Material Safety Data Sheet and package labelling comprise an integral information system about the product in question. Copies of our Product Data Sheets and Material Safety Data Sheets are available on request or from our website.

Intersleek®7180 Linkcoat application over a wide range of substrates

Self Polishing Copolymer

Self Polishing Antifouling



Controlled Depletion Polymer

AkzoNobel

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