Cargo Hold Coatings

Abrasion resistance, corrosion prevention
Ultimate defence against cargo hold damage
Cargo holds, as well as being the revenue earning spaces of the vessel, are also the areas subject to the harshest of operating environments. Various forms of impact, abrasion and mechanical damage occur from the loading and carriage of dry cargoes.

Without excellent coating protection, the structural integrity of holds can be compromised, jeopardising continuing vessel profitability and safe operation.

Faster loading techniques are increasingly being employed by ports which in turn places new demands on cargo hold coatings.

Key modes of damage in cargo holds are impact and gouging. Impact damage can occur when cargoes are loaded into holds through various mechanisms. High speed belt conveyors can rapidly break down coatings, a phenomenon known as “shooting” damage.

Gouging is a result of cargo ‘settlement’ during sailing and this form of abrasion can cause severe damage at the cargo/coating interface.

If the coating becomes damaged, exposed steel will corrode during the carriage of moist cargoes such as coal, reducing coating adhesion and leaving the steel vulnerable to further mechanical attack.

“Shooting damage occurs when coal loaders fitted with an adjustable ‘elbow’, project coal at right angles to the bulkheads. This may cause significant impact damage to a cargo hold’s corrosion protective coating, if it is of a soft type (e.g. tar epoxy) and is not abrasive resistant.”

Captain Georgi Yorgakiev, Marine Supervisor
“K” Line BULK SHIPPING (UK) LTD.

Images showing typical Cargo Hold Coating damage and subsequent corrosion caused by settlement
Protecting and preserving

We understand the extreme conditions cargo hold coatings need to withstand, and we have developed an industry leading range to meet all requirements.

When developing cargo hold coatings, we examine the unique cargo hold environment. Physical and mechanical properties of a coating are very important and need to act as abrasion/corrosion resistant barriers. We have a range of cargo hold coatings to meet all owner/operator expectations, from our toughest anti-abrasion product to our supporting epoxy coatings, long term protection is our goal. Whether a dedicated coal carrier or multi cargo vessel, we have an offer to ensure that asset protection is optimised.
Selecting the correct coating is critical to minimising damage. Our cargo hold range provides the optimum balance of abrasion resistance and corrosion prevention, delivering the ultimate performance.

**Intershield®803Plus**
Our latest cargo hold coating, Intershield®803Plus, has been specifically designed to withstand the impacts of modern high speed belt conveyors, frequently used at loading. ‘Shooting’ damage from such mechanisms can have a dramatic effect on coating lifetimes. Intershield®803Plus is our toughest ever cargo hold coating.

**Intershield®803**
Intershield®803 is a two-pack, high performance, abrasion resistant pure epoxy coating. Its excellent mechanical properties limit mechanical damage and subsequent corrosion. With an extensive track record and proven performance it offers outstanding long term protection.

**Interbond®201**
Interbond®201 is a surface tolerant, anticorrosive primer, available in two grades, a temperate version for use at temperatures down to 5°C (41°F) and a low temperature curing version for use at temperatures down to –5°C (23°F).
Designed to meet all your needs, our range of cargo hold coatings offers enhanced performance and abrasion resistance, with practical application.

**Abrasion resistance**
Excellent physical and mechanical properties that offer superior protection against impact and gouging by hard, angular cargoes such as coal and iron ore. This is likely to escalate as ports try to increase throughput and reduce congestion through the use of high speed belt conveyor loading.

**Corrosion protection**
Our range provides excellent anticorrosive performance, protecting the vessel’s structural integrity.

**All year round application**
Suitable for application and curing at a wide range of temperatures.

**Long term savings**
Extended service life is critical to owners and operators. Our products can significantly reduce the downtime and expense associated with drydocking, blasting, recoating and steel replacement, as well as the need for ongoing maintenance. Rapid curing properties ensure earliest possible return to service, following application.

**Easy clean**
A smooth finish, allows easy cleaning between cargoes.

**FDA compliance**
All our products are fully FDA compliant, and all products have an approved grain certificate.
International is the brand of AkzoNobel’s Marine and Protective Coatings business. AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals.

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Sign up to keep up to date with our latest news visit www.international-marine.com/signup

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