

Marine Case Study

# Marine Services Cargo vessel insulation installation

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#### Cargo vessel insulation installation

Shield have a wealth of experience in the application and installation of Marine insulation protocols. Working closely with our clients, we have developed strong relationships in this area.

Shield Marine were contracted to assist with the conversion works on a multi purpose cargo carrier.

The cargo vessel was purchased by a British company. Due to the owners requirement to expand the service that the ship provided, structural changes were necessary which in turn required structural insulation upgrades and improvements.

There were also machinery space changes along with exhaust insulation upgrades.

Additional storage was required under the main decks, including space for a new freezer. This was achieved by the design and installation of new steel bulkheads through two deck levels which created a separate area on each deck. These areas also required escape tunnels and A60 doors insulation and cladding.

Note that the escape tunnels offer the crew safe egress and disembarkation to and from the main deck via two newly installed A60 doors.



Completed A60 insulation Protocol applied to the newly installed steel bulkheads on two levels.



A60 doors were installed at port and starboard stations.





Cladding covering the insulation was installed as a separate application to prevent flammable fluid ingress and to offer mechanical protection against damage.

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### The engine and machinery spaces were upgraded and main and Auxiliary Engine exhausts insulation was renewed.



Insulation to Aux machinery was renewed and jackets fitted to the flanges and compensators. All these are SOLAS compliant.



Renewed and refurbished heat shields.



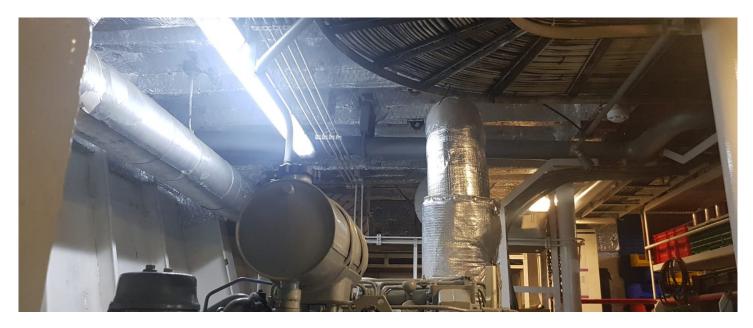
Replacement insulation jackets to exhausts with coated oil resistant glass cloth to comply with SOLAS flammable fluid containment.

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#### Engine Room Deck-head A60 insulation

This application was a high density mineral wool throughout the engine and machinery spaces with pipe and electrical penetrations, stiffeners and beams, installed wiring, trunkings and other installations which made the application complex. The installation in this area was challenging, requiring a team effort to access areas and ensure that the potentially life-saving application was installed correctly and securely.

An additional layer of wire mesh was also applied which reduces the risk of system failure.





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