



CASE STUDY – Solution for White Fish Boat

BUFCA SUPPLIER: BASF Polyurethanes U.K. Ltd
BUFCA INSTALLER: R & S Insulation Ltd

THE SITUATION

The largest fishing boat built by Parkol Marine Engineering, named 'Our Lass III', is a 26 metre long fishing trawler for a fishing company called Lockers. After fish is caught it is stored and can remain on the boat for weeks until it returns to land. The fish had to be kept as fresh as possible while the boat was out at sea. Insulation was sought to insulate the fish room.



SOLUTION

The fish hold was sprayed with polyurethane foam to fill all the voids, keep the weight to a minimum, provide some buoyancy and encapsulate the hold. The initial stage required joiners to fit wooden grounds on the deck head of the fish room. Ten inches of sprayed foam was applied to the deck head to bring it level with the raised wooden grounds. Ship yard joiners fixed plywood to the wooden grounds after the insulation was applied.



In the second stage, wooden grounds were placed on the sides and bulkheads of the hold which were filled with spray foam to a thickness of up to sixty inches in places where they had to build boxes out so the fish boxes in the hold remained in place once they were stored. Following the application of spray foam the joiners placed plywood on top of the insulation which was coated with a fibreglass gel coat for water proofing purposes.

In a third stage two inches of polyurethane foam was applied to the floor of the fish hold prior to pouring four inches of concrete into the hold as ballast. The floor was insulated to act as a barrier to the recirculation of unused warm diesel, back to the fuel tanks, underneath the hold which could otherwise thaw out the fish. Chilled water pipes were fitted over the deck head and sides to keep the temperature low to facilitate the storage of fish at correct temperatures for the whole time at sea.

The application of spray applied foam provided an effective solution to maintain a constant low temperature in the fish hold, act as a barrier to prevent thawing from the warm recirculating diesel and to provide some buoyancy. Parkol Marine Engineering is very happy with the completed works and this has helped with a new order for an identical trawler.