

F156-16 Parkol Marine Trawlers

Metallisation Equipment Protecting Fishing Boats

Metallisation's thermal spraying equipment has been protecting a diverse range of surfaces, structures and vessels for over ninety years and continues to be the chosen solution for many industry sectors. A recent project has yet again proven the longevity of thermal sprayed surfaces.

Parkol Marine Engineering, based in Whitby, has recently applied a thermal sprayed zinc coating to a new whitefish trawler, the Resilient LK195, to protect it from corrosion. At the same time as the Resilient was being coated, the 26m

single rig whitefish trawler, the Guardian Angell LK272, was back at the Whitby boatyard for a refurbishment. The effectiveness of the zinc coating process can clearly be seen to the rear of the Guardian Angel where the trawl doors are brought back on board. Despite extensive paint damage, the robust thermal sprayed zinc base layer clearly remains and continues to protect the hull from rust.



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Parkol Marine, established in 1988, offers a full range of marine engineering services and has used Metallisation equipment and consumables for a number of years. From new builds to repairs and refurbishment its reputation has been built on quality. Parkol is renowned for building successful commercial fishing vessels for the North Sea and UK fishing fleets. The company's shipbuilding yard has two work sheds, large building births that can accommodate new builds up to 25m long and a dry dock with a capacity of up to 5m draft, 42m long and 10.5m beam. Parkol is proud to continue the long Whitby tradition of boat building and repairs.

The anti-corrosive properties of the metal spraying process are widely recognised in the shipping and marine industry, where steel super structures and vessels are subjected to very damaging corrosion from the sea and salt laden air of the world's shipping and fishing industries.



Parkol opted for the Metallisation ARC150 system and a 20 metre supplies pack, which makes the system very flexible, enabling the engineer to move easily around the boat and gain access to all spray areas. Metallisation also supplied an extension trolley that included another 20m supplies pack, this ensures the energiser can be kept well away from the spray area. Due to the nature of the project, Parkol engineers used MIG reels to spray from, as they are much easier to move around and load compared to drums. In the last twelve months they have sprayed over one tonne of zinc on to trawlers of all shapes and sizes

Prior to zinc coating and painting of trawlers, the surface is grit blasted to SA2.5 cleanliness and a profile of around 75 microns. Within four hours the zinc coating is then applied which instantly cures. Finally, the zinc is then sealed and finished with several coats of marine grade paint.



The Metallisation ARC150 arcspray system has been designed for high-throughput coatings. At 500A. It can apply up to 52kg/hour of zinc or 12kg/hour of aluminium. This high capacity, combined with the flexibility of the system makes it ideal for coating large areas such as boat hulls, offshore oil platforms and other large steel fabrications. The spray rate and pistol are easy to control, also making it suitable for spraying more intricate areas like deck rails and hardware. The coating finish is very fine, which creates an ideal base for the final paint top coats.

In the Arcspray process, two electrically charged wires are driven and guided so that they converge at a point and form an arc. An air nozzle atomises the molten metal produced from the wire and projects it towards the work piece using high pressure air. This spray solidifies when it hits the surface of the work piece to form a dense coating, which protects against corrosion. The driving of the wires is typically either by air motor or electric motor and gearbox arrangement.

Stuart Milton, Sales Director, at Metallisation, says: "We know that thermal spraying with zinc is an excellent anti corrosion solution for ships and trawlers and it's always great to see that success in reality. It's been a pleasure to work with Parkol Marine and see our coatings make a real difference in reducing maintenance costs and increasing productivity of the British fishing fleet."

For more information on Metallisation, or the thermal spray process, visit www.metallisation.com, or call Stuart Milton on +44 (0)1384 252 464