



The Worshipful
Company of
Shipwrights

Case Study - Michael Dyer – Apprentice Boatbuilder (funded 2018-19)

Northshore Shipyard

<https://www.northshore.co.uk/>

In the first year of my apprenticeship I have there has been a lot to take in and learn from. Working on a boatyard had more in store than I originally imagined. I have learned about boat movement on the travel lift or the slip way cradle. Storage and the upkeep of the boats in their time at the yard.

One of the jobs which is usually done when a boat comes in for storage is wintering. This involves running antifreeze through the heads, emptying the water tanks and running it through the raw water system. Finishing off by spraying duck oil over the engine and covering in grease proofed paper. This is important as it can stop any water from freezing in any of the systems which expands and can cause damage.

Another large part of what I've done is removing and replacing the swing keels from our boats. This involves putting the travel lift around the boat and putting the boat in the stops but not lifting. We then remove all the keel bolts which is important to check because if all the bolts are not removed the hull can be severe damaged. Next the keel pennant must be involved from the retainers and pulled free of the hydraulic ram. Once this is done the boat is lifted free of the keel which pulls free of the boat by itself due to its weight and the boat is moved clear. When the boat is put back down on the sleepers padded protection is put on the edges of the hull where the keel was to prevent damage. The keel is sent off to the Foundry to be refurbished. When the keel comes back 2 coats of international Primacon are applied with an hour to dry in-between. Then 2 coats antifoul are applied with a 2 hour drying gap. Polystyrene cut outs are placed around templates and are put into the grounding plate. Arbocol is applied to the metal surfaces on the top side of the grounding plate. The boat is lifted in the travel lift and over the keel. The boat is lowered slowly over the keel and lined up so that the bolts line up with the holes in the hull. When the keel is in the bolts are tightened. The boat is lifted and sickaflex is allied to the gap in-between the keel and the hull and cleaning up the excess. The boat is then lowered.

When the keel is in a boat, the mast is usually taken down as it as the ballast and the wind could tip the boat over. The electrics for the mast are connected first as they would break if the mast was lifted. When the crane is in position someone is hoisted to connect the crane halfway up the mast. The mast is lifted and lowered and put on trestles next to the boat. It is important to label the mast and any of the removed as if any of it is moved it can always be identified to which boat it is from.

Overall my apprenticeship is going really well and I'm learning a wide variety of skills which are helping me with my apprenticeship and my future prospects.