

CASE STUDY



AUDACIOUS

Arrival of Audacious for shot blast, hot metal zinc spraying and painting internal decks and from top of mast to keel.

Once shot blasted, all surfaces are metalised which provides the ultimate protection against corrosion. The underwater hull area is then water blasted back to bare metal, before receiving a four coat paint system above and below the waterline.



Looking well, the Audacious berthed on the Shiplift is totally transformed from arrival leaving the owners' absolutely delighted.

DANISH PELAGIC VESSEL - SHANNON



The finishing touches once the painting is completed. Sign writing and design is a specialised service provided.



Deck work before and after being shot blasted, hot metal zinc sprayed, then having a four coat paint system applied.



On completion, ready to return to Denmark with a new lease of life. The owners were delighted with the quality and efficiency of the work carried out.



THE STARLIGHT RAYS

On arrival at Fraserburgh Harbour before shot blasting and metalisation treatment. This is the fourth vessel that the owner has had treated since his first, eighteen years ago.

Use of our purpose built mobile blast cleaning unit, from which four operators can work at the same time, enabled the job to be carried out more efficiently and quickly.



The vessel after the metalisation treatment process. This is the ultimate protection for steel in a harsh marine environment. As one of the pioneers of this treatment in the marine industry; vessels treated by PBP Services using this process as far back as 20 years ago are still totally rust free.



ADDITIONAL PBP SERVICES

PBP Services offer a range of other services in the **Commercial, Industrial** and **Oil and Gas** sectors, for both on and off site work:

- * Oil & Gas / Commercial Painting
- * On / Off Site Blast Cleaning
- * Fireproofing Inspection
- * Hot Metal Thermal Spraying
- * Protective Coating Application
- * Specialised Paint Finishes
- * Insulation Foam Injection / Spraying
- * Polyurea Encasement Application
- * Plastering & Paint Spraying
- * Commercial Vehicle Paint Spraying Facility
- * Vehicle Livery Application

To receive further literature detailing such services, please contact us on the details below.



WORLD CLASS QUALITY STANDARDS

At PBP Services we have the capability and experience, from working on various sites throughout the UK and Europe, to mobilise and provide professional services throughout the world.

At PBP Services we only use the highest standards of materials available from the major suppliers of marine and industrial protective coatings.



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INVERALLOCHY OFFICE - BLAST CLEANING & COATING FACILITY: Hallmoss, Inverallochy, Fraserburgh AB43 8YQ T: 01346 582032

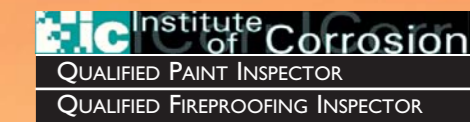
MACDUFF OFFICE: Bankhead Slip-way, Macduff, Aberdeenshire AB44 1UB T: 01261 832220

PETERHEAD STORE: Wilson Street, Peterhead, Aberdeenshire AB42 1UD

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PBP SERVICES

PETER BRUCE (PATSY) EST. 1968



- * Marine & Industrial Painting
- * Refit Works
- * Shot Blasting
- * Hot Metal Zinc Spraying
- * UHP Water Blasting / Steam Cleaning
- * Insulation Foam Injection
- * Fibre Glass Application
- * Internal & External Slip-way Facilities (up to 65 metres)
- * Fire Retardant Coating Application

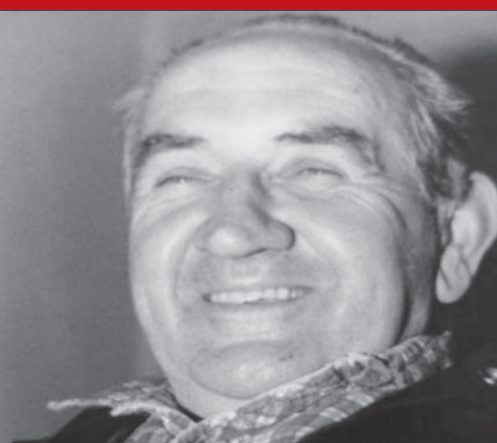


MARINE PROTECTIVE COATING SYSTEMS

HISTORY

SERVICES

SERVICES



Peter Bruce Snr. known locally as Patsy.



1968 first boat painted M/V Scottish Maid at Macduff.



Patsy & Skipper Billy Stephen, 1987.
Picture courtesy of The Press & Journal.



**SHOT BLASTING |
HOT METAL ZINC SPRAYING**



**INDOOR SHIP LIFT &
DRY DOCK FACILITY**



**POLYUREA ENCASEMENT COATING |
INSULATION FOAM INJECTION / SPRAYING**



**STEAM CLEANING |
UHP WATER BLASTING**

COMPANY HISTORY

PBP Services is a family run company which has been trading since 1968. Founded by the late Peter Bruce (Patsy) who served almost 20 years in the merchant shipping services, where one of his main tasks was organising the painting of the ships he served on as Bo'suns Mate. Patsy took particular interest in ships' painting and maintenance, moving ashore to start up business painting the fishing vessels at the ports of Fraserburgh, Peterhead and Macduff. Patsy was well known throughout the country and beyond, and worked tirelessly for the rest of his life building and developing his business which he was very proud of. Some of the original customers now have sons and grandsons who continue to have their vessels painted with PBP Services today.

In the early days all the painting was carried out by paint brush and roller. Washing of a boat's bottom was a hard task carried out with a hose and scrubbing brushes. Steel was cleaned down by chipping, wire brushing and needle de-scaling. However, Patsy was always at the forefront of any new ideas and methods available to enhance quality. As the years passed he was the first to use a high pressure power washing machine, paint spray equipment, shot blasting and hot metal zinc spraying, along with all the new types of paints to come on the market.

The business is still at the forefront of the marine protective coatings industry today with development and applications of new techniques and practices an ongoing process. Patsy's son Peter, who started as an apprentice sign writer in 1985 now runs the Company and his sister Jeannie has run the office since 1983. Peter's sons P.A. and Jonathan are now also involved in the family business. Peter and his sons are registered NACE and Institute of Corrosion Coatings and Fire Proofing Inspectors. This will ultimately enhance the quality of service on offer to local customers as well as the customer bases built up from further afield; such as the Faroe Islands, Denmark, Shetland, Orkney, England and Ireland. With slip-ways and inside ship lift facility we can cater for every need at any time of the year; always taking a great deal of pride in our jobs, just as it was all those years back.

Shot blasting gives the ultimate surface preparation; where all rust, scale and contaminants are cleaned back to the bare metal surface. This gives an excellent key for paint adhesion purposes. The surface is cleaned back to a minimum of S.A. 2.5 with an ideal surface profile of 60 – 80 microns.



Hot metal zinc is then applied after blasting and prior to painting. This is the process in which coils of zinc wire are fed through a tungsten steel spray gun, fuelled by oxygen and propane, which is ignited and then melts the zinc that is then applied as a spray onto the blasted surface profile. As the zinc comes out in spray form, it creates the same effect as galvanising.

Once applied, directly after blasting, the zinc layer can be left uncoated until the vessel goes onto the slip-way. There is no chance of rust developing before paint is applied due to the sacrificial properties of the zinc treated surface.

The indoor ship lift facility at Peterhead caters for vessels up to 44 metres in length. The advantage being, guaranteed quick turnaround without any interruptions from bad weather. This enables painting to be carried out at any time of the year unrestricted and in a controlled environment.



The Fraserburgh dry dock offers a facility which caters for a variety of vessels up to a length of 65 metres, where works can be carried out with great efficiency. The slip-way can cater for vessels up to 40 metres in length, while there is also ample quayside space for larger vessels to berth up.

With skilled tradesmen catering for all works required during refits, we can also offer services including engineering, electrical, fabrication, refrigeration and carpentry works cater for your requirements professionally and efficiently to ensure quality, value, and job satisfaction.

Over the years the quality of the fishing catch has become of paramount importance. As a result of this; a service in which we specialise is the injection of polyurethane insulation foam in fish rooms and cold storage areas, thus achieving superior temperature control and preservation of the catch during the summer months.

Also due to hygiene requirements a specialised polyurea encasement coating is used on the linings of fish holds and fish handling decks. This is a rubbery plastic bonded coating which will totally seal metal, wood, concrete and any other surfaces, thus enhancing cleaning activity and catch handling areas.

SHIPS' PAINTING

A typical paint system on the Carina and Aurelia which were both fully water blasted then painted with one coat of mastic epoxy and one coat of 2 pack epoxy high volume solids primer both above and below the waterline giving unrivalled resistance to corrosion and wear. This was followed by a 2 pack epoxy base coat and one coat of 2 pack polyurethane, achieving a very high standard of finish which we take a great deal of pride in.

Below the waterline on top of the initial two coats of primer, two coats of TBT free self polishing anti fouling are also applied. This benefits the vessel greatly as the hull is now smooth and therefore marine growth and fouling can not adhere to the surface. In turn helping the vessel steam faster, burn less fuel, reduce dry dockings, and ultimately; save considerable amounts of money on fuel costs.

Vessels that come in for general repaints where blast cleaning is not required, usually undergo high pressure washing and cleaning; disc sanding down of rusty areas with preparation discs, primer application and then painting.



Ultra high pressure water blasting can also clean vessels back to the bare steel when layers of paint applied over the years break down and no longer provide a suitable key for adhesion purposes.

This can be used above and below ships waterlines where old coatings and anti foulings are removed. The pressure of the water is up to 30,000 p.s.i., cleaning back to the bare steel. This was done on the Challenge and the Steadfast vessels where the old coatings and anti foulings were removed and a four coat system was then applied.



Peter Bruce Jr. signwriting from bo'suns chair 1986.



3rd generation: P.A. & Jonathan Bruce helping their father during holidays.



1987 Golden Sceptre on Fraserburgh's old slipway.



Pelagic Christina .S.



Trawler Seagull



Liner Polarstjornan



Trawler Carina



Painting Twin Rigger Aurelia



Water blasting Trawler Maggie .M.