



Lighthouse Pools is an innovator in swimming pool technology. When they wanted a local supplier, they called on us.

Hydraulic Power Pack for Lighthouse Pools

Lighthouse Pools is a Plymouth-based manufacturer and supplier of swimming pools, swim jets and products, including pumps and maintenance equipment.

Established in 2010, the company supplies a range of well-known pool brands to retailers and installers across the UK. They have also developed and marketed their own HeatForm® branded products.

Lighthouse Pools first became a client of Aldermans in 2020, following a recommendation by another local firm. They were impressed by their factory visit, and we have been producing a variety of fabricated metal products for them ever since.

Hydraulic Power Pack

Early in 2023, a conversation began about creating a suitable hydraulic sump for the Velocity SwimJet range. The Velocity SwimJet propels water at varying speeds across a swimming pool to create a smooth current that simulates swimming in a river.

The SwimJet needs to be powered, and so a power pack is required. This takes the form of a tank, which attaches to the pump and holds hydraulic oil. It was this housing which Lighthouse Pools asked us to fabricate.

In terms of the design, we were able to create engineering drawings from a model and sample provided by the customer. We can work from samples, photographs and drawings in all file formats, but models typically help us to provide the most efficient service.

Cont'd



Multiple processes

At Aldermans we have numerous metal fabrication processes in-house, and this means we have a high degree of control over both production quality and lead time.

- **Laser Cutting.** We began the manufacturing process by laser cutting the core shapes required on our 4Kw Fiber Laser.
- **Folding.** The pieces then progressed to our folding department, where they were folded using one of our Amada CNC press brakes.
- **Turning.** A ½” BSP threaded boss was machined on one of our CNC lathes in the toolroom.
- **Welding.** The pieces were welded together as per the engineering drawings we created.
- **Riveting.** We inserted 8 off M8 rivet nuts into the top of the welded assembly to allow for the lid to be fixed.
- **Testing.** Each unit was tested for leaks using a pressure testing jig, created in house.
- **Tapping.** The top plate was tapped to suit the pump and motor mounting hardware used when the customer assembles the unit.
- **Powder coating.** The box and lid were both powder coated in RAL9005 30% gloss, for a neat and protected finish.



Call-off stocks

The lead time from the initial design stage to finished product was just over two months. However, once the design was confirmed and an order placed, production of an initial batch of twelve units took just three weeks. Orders will be ongoing, and we have placed a 'call off' arrangement in place with the client to ensure continuity of supply whenever needed.



www.aldermantooling.co.uk

LIGHTHOUSE

www.lighthousepools.co.uk



www.hf-velocity.com

“We were very pleased with the support Aldermans provided for this project. They are proving to be a helpful, proactive and reliable manufacturing partner, which is valuable as our business continues to grow.”

Daniel Phillips, Managing Director
Lighthouse Pools Ltd