

On Site Pontoon Build Procedure

1. Purpose

The purpose of this build procedure within Gael Force Fusion is to provide information to allow assembly of the pontoon sections into one final pontoon including final installation.

2. Scope

The Scope of this build procedure is to ensure that the Pontoon is built in accordance with relevant drawings and procedures.

3. References

3.1. Internal Documents and Forms

Document Reference Number	Document Title
QF 3200	Production Form
QP 7122	Butt Welding Polyethylene Pipe Procedure.
QP 7124	Electrofusion Welding Polyethylene Pipe Procedure.
As per project assigned	Pen Assembly Drawings

3.2. External Documents

Document Reference Number	Document Title
Welda operating instructions EDOI6806	Welding standard WIS 4-32-08 issue 4 June 2016 standards
ISO 9001:2015	Quality Management System

4. Definitions and Acronyms

Word or Acronym	Definition
N/A	

5. Responsibilities

- 5.1. It is the responsibility of the Technician to ensure that this build procedure is fit for purpose and the information contained within is accurate.
- 5.2. All relevant staff are trained to follow this build procedure and as such it is their responsibility to ensure that all associated build procedures and forms are utilised.
- 5.3. It is the responsibility of the operative to ensure the correct PPE and relevant inspection checks of tools and equipment are carried out before assembly commences.

6. Safety

- 6.1. Gael Force Group has a responsibility to comply with the Health and Safety at Work Act 1974 and Management of Health and Safety Regulations 1999.

- 6.2. The main health and safety risks are with the manual handling of the components and the operation and use of associated equipment for the operation. Risk assessments for all equipment should be read and understood. All manual handling should follow HSE Guidelines, including wearing appropriate PPE for this work.

7. Equipment Used

- 7.1. Butt Welding machine, capability as per contract requirements.
- 7.2. Extrusion gun.
- 7.3. Hot air gun.
- 7.4. Ground sheet.
- 7.5. Pipe rollers.
- 7.6. External de-bader suitable for OD of welded pipes.
- 7.7. BDI unit.
- 7.8. Ratchet straps.
- 7.9. Samsung tablet or phone device with Control point ap.
- 7.10. Bin for PE waste /1T tote bag.
- 7.11. Blue roll.
- 7.12. Forklift.
- 7.13. Snips for cutting metal.
- 7.14. Pallet to store wooden pipe beams.
- 7.15. Yellow pencil.
- 7.16. Lifting slings.
- 7.17. Hand scraper.
- 7.18. Electrofusion control box.
- 7.19. Suitable power supply or generator
- 7.20. Extension leads.
- 7.21. Hand tools.
- 7.22. Cable tie.
- 7.23. Cordless circular saw.
- 7.24. Cordless drill.
- 7.25. Cordless impact drive.
- 7.26. Cordless reciprocating saw.
- 7.27. Measuring tape.
- 7.28. Drill bits 5mm.
- 7.29. Countersink drill bits 5mm /pozi screw ends.
- 7.30. Decking space template.

8. Process

- 8.1. The equipment used to perform the task should be set up according to manufacturers' instructions and only used by a trained operator.
- 8.2. Place two sections of the pontoon on designated flat area with the ends of both sections close to each other.
- 8.3. Make sure the pontoon sections sit on rollers or are supported by pipe sections.
- 8.4. When both sections are placed straight and level butt weld the pipes to join both sections together, using procedure **QP 7122**.

- 8.5. Set base units into position required as per drawing.
- 8.6. Make sure the position of the EF stops is matching with the requirement on drawings assigned to the project.
- 8.7. Prepare pipes for fitment of the electrofusion stops following good guide for EF welding and **QP 7124**.
- 8.8. Spaces between the base units must be measured equally to accommodate the pontoon beam. The distance is shown on drawings assigned to this project.
- 8.9. Mark required distances on outer pipes of the pontoon.
- 8.10. Place required amount of pontoon beams in between base units.
- 8.11. Feed 50mm sdr 11 6mtr long pipes through the pontoon beam holes and also through the 53mm holes in the base units. See drawings assigned to the project.
- 8.12. To joint 50mm pipe sections use 50mm EF coupler and follow EF welding procedure **QP 7124**.
- 8.13. Make sure 50mm couplers are positioned to allow the pontoon beams being moved into position required.
- 8.14. Move pontoon beams into position previously marked by yellow pencil.
- 8.15. Make sure pontoon beams are in position prior to decking.
- 8.16. Place 10 decking profiles at the section where you are about to start decking. See drawings.
- 8.17. Draw a centre line down the middle of the back to back pontoon beams.
- 8.18. Spread the decking boards to accommodate 3 jig templates on the ends and middle of decking boards.
- 8.19. Make sure the jig is in place prior to further operations.
- 8.20. Make sure the yellow line marked previously at the centre of the pontoon beams is visible through the gap between decking boards and is in centre position.
- 8.21. Prior to drilling decking boards make sure required position of the screws are marked as per drawing.
- 8.22. Once marked, drill a pilot hole and place screw into pilot hole.
- 8.23. Make sure all swarf created during drilling and cutting process is controlled. All waste must be placed into bins provided.
- 8.24. Screw decking boards down.
- 8.25. Fit stainless-steel cleats into sockets on base unit if required.
- 8.26. Position of cleats will be marked on the drawing assigned to the project.
- 8.27. Once all screws in place, cut the excess of the decking boards.
- 8.28. Make sure position of cut is straight on centre of pontoon beam.
- 8.29. Place another section of deck unit on top of the beams.
- 8.30. Make sure there is a 5mm gap between deck ends.
- 8.31. Repeat process of screw fitment.
- 8.32. Instal anti slip across joining section of the decking boards as per drawing.
- 8.33. Repeat process of joining and finishing of pontoon section until complete.
- 8.34. Place upright posts into handrail pipe section and place into base sockets.
- 8.35. Make sure upright post is sitting correctly in base sockets prior to drilling them for socket pin installation.
- 8.36. Make sure all swarf produced during this operation is controlled and disposed appropriately into waste bins assigned into project.

- 8.37.**Join handrail pipes. Perform butt welding following procedure **QP 7122**.
- 8.38.**Instal life rings into handrail as per drawings.
- 8.39.**Set up handrail post straight prior to drilling and fitting FC Pins assigned to the project.
- 8.40.**Make sure all swarf produced during this operation is controlled and disposed appropriately into waste bins assigned into project.
- 8.41.**Final visual quality inspection of the pontoon to take place prior to launching. Once the pontoon is in a position to perform connection to concrete bridgehead, lift end of the pontoon by forklift or another machine assigned to this task
- 8.42.**Make sure lifting equipment assigned to this task is inspected prior to this task and has relevant certification.
- 8.43.**Connect stub flanges from end of the pontoon to stub flanges set in concrete block by bolts assigned to this task.
- 8.44.**Once pontoon is connected to the stub flanges in the block you will spread your final two bases and fit stops as per drawing.
- 8.45.**Spread beams on this section into position and deck over as required.
- 8.46.**Screw down rest of the anti-slips as per drawing requirements.
- 8.47.** Perform final inspection of the pontoon.

9. Packaging and Dispatch

- 9.1.** N/A

10. Training

- 10.1.** Training, where identified as required will be provided by the relevant Design/Manufacturing Engineer or Line Manager. The person who conducts the training is responsible for allocating the training in within Mango.
- 10.2.** Employees must complete the e-assessment within the Skill module in Mango to verify that they have read and understood the contents and requirements of the procedure.