

Renown Group has over 35 years' experience in Fabrication covering high integrity projects in various materials. The following project exemplifies the depth of welding capability, and the willingness to engage with clients to resolve short or long term supply chain problems.

The project

Renown Engineering were tasked with fabricating a 200mm thick high integrity, safety critical Padeye assembly for an oil and gas application.

The customer had been previously let down by a contractor that was unable to meet the demands of the client specification for welding high strength steel.

Issues to overcome

The original subcontractor machined the items to size therefore any distortion during the welding process would ruin the project. The joint configuration was also so acute that access for welding was impossible.



Padeyes positioned into re-machined slots ready for welding



Padeyes welded into the base plate

Approach

To overcome the difficulties of allowing access for welding, Renown redesigned and re-machined the weld preparation to enable access for welding to take place.

Renown qualified a welding procedure to cover the thickness range (200mm) and qualified welders against the procedure.

Once welding had commenced it was critical that a preheat was maintained. This was especially challenging due to the constant manipulation required in order to balance the weld and minimise distortion. A frame was manufactured to hold the component during the welding process.

A high temperature UT probe was acquired to allow constant volumetric inspection throughout the welding process. Final NDT took place 48 hours after weldment reached ambient temperature.

Due to the speed of response, Renown was able to deliver to the customer's specifications and on time.