

CASE STUDY - Sub Sea Doubler Plate Machining

- **Requirement:** A 30" pipeline required the seam weld crown removing for clamp installation and the anode doubler plates removing for relocation at 90m water depth. Cold cutting was specified and a pre requisite from the client was to guarantee that the machine could not to cut into the parent pipeline.
- **Location:** Dunbar expansion project North Sea — 90m water depth
- **Equipment:** Mirage gantry MR1000SS and pipe chain clamping system for sub sea installation with chain tensioner to allow diver installation.

For the seam weld the machine was mounted onto the pipeline and had fixed feed stops that reversed the feed direction at the milling machine axis extremities. There was also a fixed depth stop so that at no time could the pipeline be machined.

For the doubler plate machining the machine was rotated around the pipeline to remove the whole mounting plate in 3 hours.

Milling of the seam welds took less than 1 hour over a 3m length.



The work shop mock up with seam weld and doubler plate machining with the MR1000SS and chain pipe clamp system.