

EFFICIENCY OF STREAMLINED HUB INCREASED



The problem

An oilfield service company approached Probe to complete a full visual and dimensional inspection on a 6" GR-52 streamlined hub c/w 90-degree cushion elbow. The component was badly corroded on all sealing areas and internals.

This was a task for which Probe are ideally qualified, as Dave Good, Technical Sales Manager, Probe, explained: "Probe is not just a manufacturer of components; we have the in-house capability to refurbish and recertify existing equipment. This is a cost-effective and sustainable option for our clients as they look to maximise the life of existing equipment and minimise inefficiencies."



The solution

After Probe's in-house inspectors performed a full assessment of the cushion elbow, the team completed a full inspection report which was submitted to the client for review. The report provided a full evaluation of the condition of the component which included tolerance tests and visual findings.

Probe also recommended a procedure and refurbishment process to reinstate the equipment into an operational condition. This review was well received by the client and subsequently it was decided to refurbish and streamline the cushion elbow, rather than manufacture a replacement item, as this provided a more cost-effective solution. The approach also enabled a solution to be delivered to the client's short operational deadlines.

"As part of the refurbishment, all the sealing surfaces were rough machined to oversize allowing an Inconel weld inlay to be installed over the sealing area," said Dave Good. "Once this operation was completed the Inconel inlay was machined back to the specification required for the sealing face which ensured that the component still met with the required manufacturing tolerances. The internal areas were then inlaid with Inconel to help prevent further corrosion for when the component will be used in extreme environments."

Once the refurbishment had been completed the item was revalidated with third party certification and pressure tested to the required test pressure. This specification was in accordance with API 6A (20th Edition, NACE MR-01-75) and the client's requirements.

The result

Probe provided a full in-house inspection, recommendations, refurbishment, machining and testing service. All components were fully recertified to the specified requirements and the final product was supplied painted to the client's design expectations and requirements.

The ability of Probe's multi-skilled team to provide a full cost-effective solution in the required time frame was particularly valued. We are now looking at other systems that could benefit from Probe's refurb and upgrade service to further increase operational efficiency of our components.

