

Hydrocyclone Repair vs Replacement

Overview

There has been an amalgamation of specialist equipment suppliers into larger multi-product companies that work across all areas of Oil and Gas processing. In EnSep's experience this has meant that Operators often find it difficult to contact the responsible spares authority and when they do, the responsible authority does not support or have knowledge of acquired or older technology.

Scenario

31-in-1 hydrocyclone bundles were installed in vessels on a platform in the North Sea. The Hydrocyclone bundles are periodically removed and inspected due to high solids production and erosion of the hydrocyclones. The 31-in-1 bundle is dismantled, inspected and any eroded hydrocyclones replaced with new, before the bundle is reassembled for re-installation in the vessel.

The Client was looking for a quick, cost effective turnaround and were not receiving this from the Original Equipment Manufacturer (OEM) who were only interested in supplying new replacement hydrocyclone liners



Split hydrocyclone with erosion at the top of the taper section only



*31-in-1 hydrocyclone received by EnSep ready for inspection and repair.
Note damage to locating lugs circled*

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EnSep Response

EnSep could have provided like for like spare liners for the 31-in-1 at a 30% saving on OEM prices, but we were also keen to provide Client with alternative price options.

EnSep split the liners around one of the circumferential welds so that an internal inspection of the liner could be completed. This showed that the majority of the taper sections were in good condition and the erosion was only at the start of the taper section see photo. This meant that we could offer the Client a low cost option of removing the top couple of inches of the taper section and replacing with a new 'egg cup' insert before rewelding to make the liner good. This gave the Client a further 55% price saving on the EnSep new liner price.

Ensep were instructed to make the hydrocyclone liner repairs and to replace some of the locating lugs that had been damaged. The 31-in-1 bundled was then reassembled with a new set of soft parts and returned to the Client ready for installation back in the vessel.



Hydrocyclone Liner with 'egg cup' Section Repair

EnSep Hydrocyclone Spare Part Capabilities

The EnSep ENO70 and ENO38 hydrocyclone can be installed as a like for like spare hydrocyclone in most applications with the minimum of modifications. In addition, EnSep manufacture and supply equivalent spares for a large range of older generation hydrocyclones.