

RESTORING A PROCESS PUMP FOLLOWING PREMATURE FAILURE



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SERVICE MATTERS

Detailed inspection and overhaul return a critical asset to the required standard

AVTPUMP was asked by an existing customer to investigate a process pump that had failed shortly after being repaired by another provider.

The site operates within a highly regulated chemical manufacturing environment, where equipment integrity is essential to controlling downtime, safety and environmental risk. The objective was to identify why the previous repair had failed and return the pump to the correct operating standard.

CHEMICAL PROCESSING

THE CHALLENGE

The pump had been installed following an external repair but failed after only a short period in service.

Unexpected failure on this type of site can lead to increased maintenance costs, production disruption and additional safety and environmental exposure. A thorough assessment was therefore required before the asset could be returned to operation with confidence.

OUR APPROACH

The pump was sent to AVTPUMP for a complete strip-down, dimensional inspection and overhaul assessment.

Rather than replacing only the visibly damaged components, the engineering team reviewed the full build quality, mechanical seal installation, component dimensions and suitability of the parts used during the previous repair.



“This repair demonstrated why a thorough dimensional inspection & correct build standard matter. By identifying the issues left by the previous overhaul and returning the pump to the required specification, we were able to restore reliable operation and rebuild the customer’s confidence in the asset.” AVTPUMP Engineer

OUR FINDINGS

Inspection identified several serious issues with the earlier overhaul. Bolts were missing from bearing covers, the mechanical seal had been incorrectly set, and grub screws within the seal arrangement were either loose or absent.

Significant internal damage was evident throughout the pump, while dimensional checks confirmed that the bearing lands were oversized.

Parts that did not meet the required original specification had also been fitted, creating further concerns for an asset operating within an ATEX-regulated, top-tier COMAH environment.

OUR SOLUTION

AVTPUMP completed a full overhaul using correctly specified components and restored the pump to the required original dimensions and build standard.

The mechanical seal arrangement was correctly installed and set, all missing or unsuitable components were addressed, and the pump was rebuilt to provide a reliable and compliant repair.

THE RESULT

The pump was returned to service with no further issues reported. The quality of the investigation and overhaul restored the customer’s confidence in the asset and strengthened the long-term working relationship. AVTPUMP has since remained the customer’s preferred pump repair



AT A GLANCE

Industry:	Chemical Processing
Application:	Regulated process pump
Services Provided:	Full strip-down, dimensional inspection, pump overhaul & mechanical seal installation
Products Used:	Correctly specified replacement components & AESSEAL® sealing equipment
Key Issue:	Premature failure following an incorrectly completed third-party repair
Outcome:	Pump restored to the required standard with no further issues reported