

## PROJECT WTW SURGE VESSEL REPLACEMENT



Stonbury were contracted to repair a surge vessel situated on a water treatment works site. The vessel had failed the relevant pressure vessel insurance requirements and after inspection of the asset, evidence of coating delamination and corrosion was also found.

Due to the relatively small diameter of the surge vessel, a new and compliant manway could not be installed, as this would not allow for the required grit blast and coatings. Resizing the vessel was also not an option as the building had insufficient space to house a bigger system.

It was decided the most practical solution was to design, fabricate and install a replacement vessel, using corrosion-resistant stainless steel. The new design would not require the application of any internal coatings and removed the necessity for a 600mm diameter manway.

Once the design work was complete, the vessel was constructed off-site and a non-destructive test was performed to ensure the vessel had been designed and fabricated to meet all relevant specifications. A 300mm inspection hatch, fitted with a blind flange and handles was also installed for future testing.

The new surge vessel was moved into position using the buildings original tracked winch, which was tested by the client prior to works commencing on site. Once in position, the original gauges, airlines and valves were connected, and the asset was cleaned ready for inspection.

All commissioning documents were passed onto the client and the maintenance-free asset was put back into service.