



Stonbury's expert inspection and refurbishment programmes help prolong the lifespans of surge vessels and ensure they remain compliant with regulations.

Surge vessels play a critical role in managing pipeline pressure in water supply networks. Each vessel contains pressurised air to regulate flow velocity and act as a buffer in case of pump failure or power outage. In accordance with the Pressure Systems Safety Regulations (2000), they are legally required to undergo regular inspections to assess their condition.

Surge vessels contain both air and water, creating a prime environment for rust. If just 5-10% of corrosion is present, the vessel must be replaced, therefore early intervention is crucial. Unfortunately, many older vessels lack hatchways large enough to facilitate modern regulation-approved inspections or internal repairs.

Stonbury's sustainable programmes avoid unnecessary replacements by modernising and refurbishing assets to extend their lifespans. This avoids removing vessels from existing infrastructure and significantly reduces environmental impact, cost, and asset downtime.

Stonbury works with a third-party inspector to provide early intervention and make immediate repairs, appropriately scheduled to minimise service disruptions. Its expertise in potable water infrastructure and Regulation-31 compliance guarantees precise application of coatings, while ensuring other equipment is properly protected from dust.

In cases where inspections reveal that a replacement is necessary, Stonbury is trusted to offer a reliable installation. Stonbury's complete service secures the safe operation of clients' surge vessels for many years.

Stonbury's refurbishment programmes include:

- Expert visual inspection
- Ultrasonic thickness readings of the tank walls to highlight degradation
- Computer design calculations
- Hatch replacements including fabrication, installation and magnetic particle testing
- Patch repairs to areas of corrosion on vessel walls
- Third-party supervised hydrotesting
- Regulation 31-approved internal coatings which can prevent rust for up to 25 years
- UV and weather protective painting of exterior surfaces
- Repairs, modifications or replacement of valves, pipes and telemetry equipment
- Re-calibration of Pressure Reducing Valves (PRV)