

Case study

Absorber Column



SAFETY

The Ca-Zoom HD removed the necessity for confined space entry and rope access



DATA QUALITY

High-definition imaging enables inspectors to detect defects and deliver precise information. Data collection with the Ca-Zoom significantly enhances traditional RVI methods



SAVINGS

Reduced administrative efforts for entry permits and the utilization of a specialized rope access inspection team, ultimately minimizing downtime and process costs

Client Expectations

The customer aimed to find a safer, more cost-effective and faster method for inspecting their 12 meters absorber column by lowering a camera from the top. Previously, inspections involved human entry using rope access to lower the inspector down the column.

To address these challenges, the customer engaged the Waygate Team for a Proof of Concept on one tank, aiming to establish a new, safer inspection standard that eliminated confined space entry while enhancing data accuracy and overall efficiency.

Our Solution

The Ca-Zoom HD system integrated advanced technologies to enable safe, efficient inspections of confined spaces. Its full HD camera, featuring 30x optical zoom, was lowered down using the camera cable. With the camera's Pan-Tilt functionality, inspectors could reach all critical areas within the column, such as welds, nozzles, and internal structures like trays. The carrying backpack enabled the inspector to easily access the top using a ladder, while the use of an external AC battery eliminated the need for an electrical outlet at the top of the column.

The Outcome

The primary goal of the absorber column inspection was to assess overall asset integrity and identify potential defects that could pose immediate risks. Additionally, the customer wanted to determine whether data from the Ca-Zoom would be sufficient for routine preventative maintenance without rope access.

Waygate successfully delivered these results. The combination of system portability with backpack and external battery allowed for a comprehensive inspection using a single configuration. The entire process, including system setup, was completed in under an hour, with all necessary perspectives and areas easily assessed.

The client confirmed that Waygate's systems provide a viable alternative to traditional confined space entry. By utilizing the Ca-Zoom, inspectors remained safely outside hazardous areas, reducing risk while also saving time and costs. This solution not only improves efficiency but also enhances workplace safety, reinforcing the value of remote inspection technology.



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