



## CHALLENGE

Reduce OPEX associated with visual inspection of boilers at a power station.

## SOLUTION

Use remotely operated drone to perform inspection.

## RESULTS

Drone inspection has saved the customer 650,000 ZAR in OPEX, improved planning and safety.

## Power Station Operator Reduces Cost of Visual Inspection for Boilers by 650,000 ZAR

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### Customer sought a more cost-effective method of visual inspection

It is of paramount importance to inspect critical components of a power station periodically to ensure operational reliability and safety. One of the most challenging components for inspection is a boiler. The conventional inspection method requires scaffolding, which normally takes weeks to build. Once scaffolding is erected, technicians climb and inspect each section of the boiler which takes approximately 12 hours. Once a boiler is inspected, the scaffolding has to be dismantled and erected again inside another boiler. This method has proven to be costly and time-consuming. It also poses a safety risk to personnel. As a result, the power station operator decided to look for alternative inspection methods to improve planning activities, reduce operational expenses, and enhance personnel safety.

### STANLEY Inspection deployed a drone for boiler inspection

STANLEY Inspection deployed a remotely controlled drone to carry out the internal boiler inspection. The drone was equipped with a digital camera and was enabled with zooming and real-time video streaming capabilities. A technician observed the internal wall of the boiler in real-time and was able to zoom in on suspicious spots when needed. It took 40 minutes to complete the tube leak detection with UAV, compared to 4-6 hours with conventional rope access.

### Customer saved 650,000 ZAR on boiler inspection services

Customer saved 650,000 ZAR by using STANLEY's drone inspection technology. Savings came from the following areas:

- Improved planning: 200,000 ZAR
- Reduced inspection time and crew: 250,000 ZAR
- Elimination of scaffolding: 200,000 ZAR

By utilizing drone inspection, the safety risks associated with technicians working at high altitudes were eliminated. It also created a permanent record of inspection which may serve as an invaluable supporting document in case of a future insurance claim investigation.

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