

Robot Inspection in Crocodile-infested Waters



ASI Group, a global specialist in inland waters, has deployed a Saab Seaeye Falcon robot into crocodile-infested waters in East Africa to inspect and survey the infrastructure supporting five power stations. The crocodiles had been preventing the manual inspection of remote inland underwater structures.

The underwater structures are critical to the continuous operation of facilities that

provide electricity to over 20 million people. The company used a truck crane to remove covers and stoplogs and to launch the Falcon in a variety of access locations, while keeping personnel a safe distance from the crocodiles.

The Benefits of Remote Access Technology

The Falcon's small size and powerful thrusters allowed it to navigate through strong currents and complex structures with precision, while its sonar system and inertial navigation system provided a clear understanding of the installations' conditions. Even in extremely murky waters, the smallest anomalies in structures were captured on the Falcon's sonar by ASI operators. The remote access technology enabled inspection and survey operations in locations that are inaccessible and unsafe for personnel. Using the [Falcon](#) for tunnel inspection avoided dewatering, which risks the tunnel's infrastructure and may even cause collapse.

[ASI](#) used the survey data collected to construct 3D models of the various water control structures. By reviewing and comparing the collected data with known build data, a clear understanding of the installations' conditions was established. Repeatable assessment across the locations using remote systems and acoustic inspection devices allowed the detection of anomalies and their change over time.

In conclusion, the Falcon's versatility and reliability helped ASI to achieve considerable cost savings and ensured the safety of personnel. The robot is one of the world's most popular robots in its class, with a reliability record covering over a million hours underwater.



Robotic inspection in crocodile-infested waters: ASI Group deploys Saab Seaeye Falcon to survey power station infrastructure in East Africa.