



Drone Services

Albion Marine Solutions provides Drone Survey Services. There are many advantages of using drones:

- Reducing risk: inspector can stay far from dangerous locations/situations.
- Savings—liability insurance, temporary structure, downtime.
- Increased safety through increased inspections. Given the relatively low cost of drone inspections, many companies are using them to perform inspections more regularly, which means that potential problems can be surfaced and address more quickly.
- Better records. Archivable drone data represents a meticulous record of the condition of an asset over time.



Condition Assessment Survey

Tank internals survey:

- Most intuitive, reliable and precise indoor inspection drone.
- Real-time HD feed to surveyor/owner in office.
- Spherical carbon-fiber cage protects propellers from impacts and makes it confined space inspection capable.
- Tested to pass through manhole on vessels.

- Photogrammetry software makes it 3D imaging capable
- Can be added on with LIDAR V1 & HF1 technology, with on-board processing for real time LIDAR analysis.
- Simultaneous Localization & Mapping (SLAM) allows accurate 3D mapping in GPS-denied environments such as indoors, underground or close to large structures.



3D Imaging & Photogrammetry

- Provides 3D model of inspected space.
- Easier to spot faults in space instead of going through a 1000 photos with map of internal structures.
- Locating, quantifying, measuring faults precisely.
- Saves time and thus saves project cost.
- Easier volume and dimensional calculations.
- For piping surveys/inspections: It allows for shape, elevation of pipe from inside, condition, distance of a defect.



Ultrasonic Thickness Measurement (UTM Gauging)

- Spot thickness reading capable.
- A-scan readings at a target position with 5cm precision in diameter
- Real-time waveform input to inspector on ground
- No GPS signal requirement
- UT readings will have resolution of 0.01mm. Measurable thickness range of 1mm to 635mm
- Bespoke design to measure along curved surfaces.

Usage: Ships, storage tanks, cranes, offshore platforms, wind turbines and bridges.



Condition Assessment Survey

- High resolution 24MP x & camera. Excellent for surveying/GIS/Mapping.
- Long range and flying duration
- Weather resistant aircraft and can perform in windy and rainy conditions
- Two anti-collision beacons installed on top
- Complies with FAA's night waiver standards.

