



OFFSHORE ASSET INSPECTION SOLUTIONS

MISSION & VISION

The VAWIS Project addresses the growing need for efficient, accurate, and cost-effective offshore wind inspections by integrating cutting-edge drone and sensor technologies. With a focus on advanced analytics, predictive maintenance, and seamless integration, VAWIS aims to lead the market in offshore asset inspection solutions.

PROBLEM

Offshore wind turbine inspections are labor-intensive, costly, and hazardous. Traditional UAV-based solutions often struggle with precise detection in extreme weather and GNSS-denied environments, leading to blind spots and increased maintenance costs.

SOLUTION

The VAWIS project introduces autonomous drones equipped with advanced fusion sensor technology, machine learning algorithms, and digital twin technology. Operating from docking stations installed on turbines, these drones perform automated inspections, providing accurate defect and corrosion detection, supported by comprehensive data analysis and real-time performance monitoring.

APPLICATION

- o Primary: Offshore wind farms
- o Secondary: Oil and gas platforms
- Tertiary: Maritime infrastructure

KEY POINTS

- Improved Inspection Accuracy: 40% more accurate defect detection compared to traditional UAVs.
- o Cost Reduction: Up to 40% lower maintenance expenses.
- Predictive Maintenance: Al-driven models for proactive inspection & maintenance
- Operational Efficiency: Increased %60 inspection human intervention



