

Tech Offer – Intelligent Systems

Tower Crane Wire Rope Vision Inspection System

- Tower crane wire ropes must be inspected daily before operation. It is a manual task that requires an inspector to climb the crane and cannot be performed while the crane is in operation, leaving the rope unmonitored during the very hours it is most at risk.
- Our solution uses modular high-framerate cameras mounted near the cable reel to capture a 360-degree view of the rope during operation, paired with a deep learning model trained on defect images that detects and classifies anomalies in real time, alerts the operator, and continuously improves as it learns from new field data. The same technology can be applied to other inspection needs as well, such as elevator cables
- For any difficult inspection challenge, like fast-moving parts, poor lighting, or hard-to-capture defects, we can configure a suitable camera system and train an AI model to detect the defects

