



SCARLET | TECH

CASE STUDY

HerculesPro Wireless Crane Camera at Chickamauga Lock Replacement

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Monitoring multiple crane operations in a complex construction site has become easier with HerculesPro wireless crane camera. This solution has been utilized at the Chickamauga Lock Replacement project to ensure safe and efficient crane lifting monitoring.

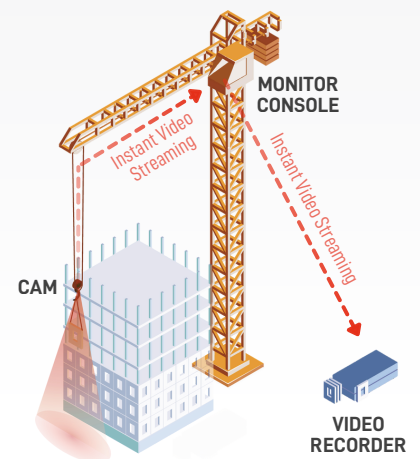
BACKGROUND

This project aims to construct a new 110-ft by 600-ft lock chamber to replace the 60-ft by 360-ft lock, which has been operated since 1940. It requires at least five tower cranes, each equipped with crane cameras to provide live video feeds of the loading area for cabin operators.

Two nearby offices also need access to these live video feeds to ensure crane operation is safe. However, a traffic bridge separates the construction site from the offices, which may potentially disrupt the instant video feeds transmission to the site offices.

Shimmick Construction Company, known for its expertise in water infrastructure projects nationwide, serves as the prime contractor for the Chickamauga Lock Replacement.

HerculesPro Standard Setup



▼ The ongoing construction at Chickamauga Lock Replacement, Tennessee





SOLUTION

As the prime contractor of this project, Shimmick trusted HerculesPro to provide instant video feeds for cabin operators and site officers. Five HerculesPro are installed on the five tower cranes, providing clear and instant video feeds of the loading area using 5GHz WiFi technology to the two offices.



Five HerculesPro were installed on each crane hook, equipped with batteries, 5GHz WiFi AP transmitters. Monitor consoles are placed in each crane cabin, allowing operators to view the lifting area.

Two control systems and directional APs are positioned higher than the traffic bridge to receive wireless video feeds from the tower cranes and transmit them to the offices.

Two cloud-based video recording systems and directional antennas were set at two site offices, ensuring reliable monitoring of crane lifting operations.



- ▲ Real-time monitoring of 5 crane cameras remotely at the site office
- ▶ Clear video feed in low-light conditions, monitored from inside the crane cabin



This HerculesPro solution was customized to perfectly suit the construction landscape. Enabling immediate response to safety hazards and reduces downtime of the project.

DISCOVER NOW

Scarlet Tech specializes in delivering tailor-made, state-of-the-art HSE instruments for accurate measurement and real-time monitoring in demanding environments. Comprehensive range of professional HSE instruments: wireless anemometer, wireless crane camera system, heat stress meter, class 1 & 2 sound level meter.