



SCARLET | TECH

SKYTITAN CASE STUDY

Tower Crane Camera System: Eliminating Blind Spots on a 3-Crane Construction Site

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At an urban construction site, San Ching Engineering operates three tower cranes. Operators face limited visibility during lifting operations from the cabin, while site management needs to monitor activity across all three cranes. To address both needs, SkyTitan wireless crane camera system was deployed, helping eliminate blind spots and enabling remote monitoring.

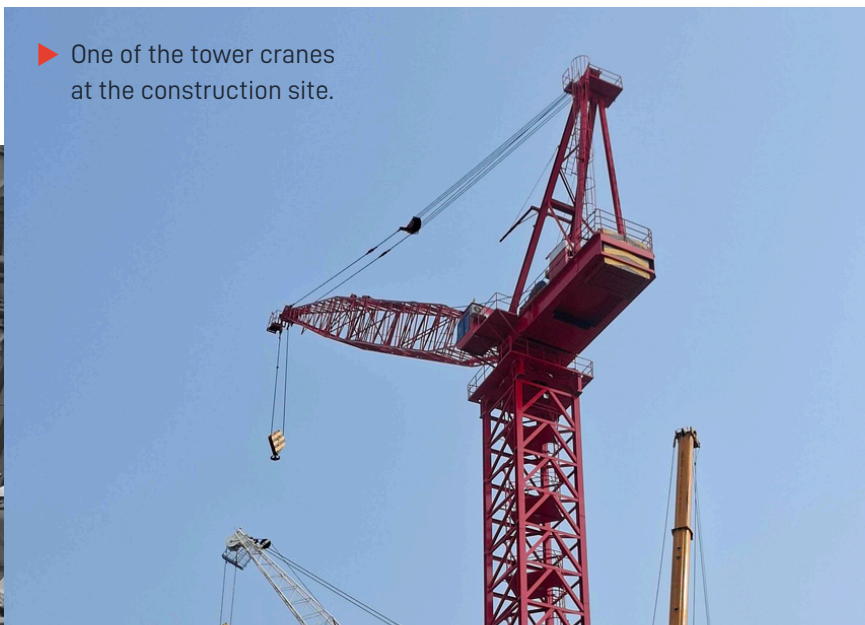
BACKGROUND

The site involved three tower cranes operating. From the operator's cabin, the lifting area and surrounding ground activity were difficult to see clearly due to height. Critical details, such as hook alignment, load placement, and the position of ground crews, were harder to assess accurately from that distance.

Lifting operations depended heavily on signal personnel on the ground. While effective, this added communication that could slow each lift and increase the risk of miscommunication. At the same time, with three cranes operating at once, site management needed to monitor all crane activity in real time.

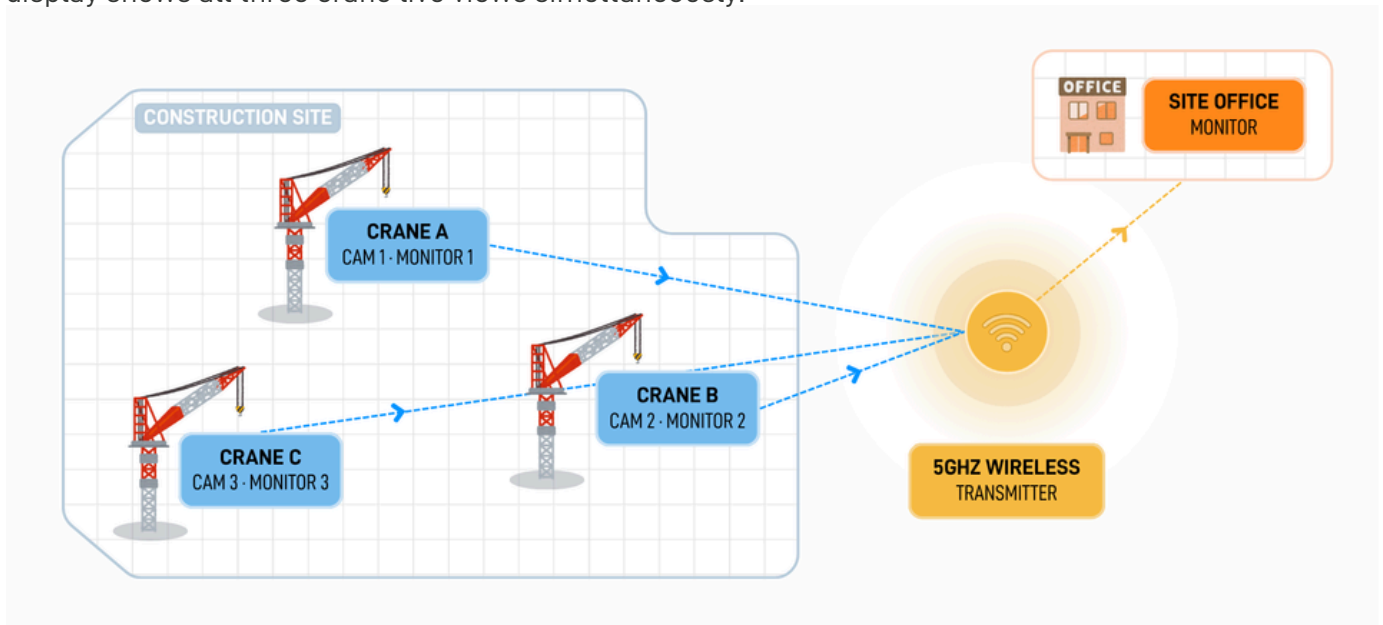
San Ching Engineering is a comprehensive construction company based in Taiwan. It specializes in turnkey contracting and construction management for a wide range of projects, including luxury residences, office buildings, shopping malls, hotels, and hospitals.

▶ One of the tower cranes at the construction site.



THE SOLUTION: HOW SKYTITAN SOLVES THIS

San Ching Engineering deployed 3 sets of SkyTitan across three cranes on site. One complete set per crane, each consisting of a camera mounted on the boom tip, a dedicated monitor console in the cabin, and a 5GHz wireless transmitter. All three camera feeds are transmitted to the site office, where a single monitor display shows all three crane live views simultaneously.



1 Mount the camera at the boom tip

SkyTitan camera gives a clear bird's-eye view. With 25x optical zoom, operators see detailed views of the hook, load, and landing area on the cabin monitor.

2 Wireless access point handles the connection

A 5GHz wireless access point provides stable video transmission from the camera to the site office monitor in signal-heavy environments.

3 Real-time monitoring from site office

The site manager in the office monitors all three cranes on a single monitor display, providing three camera feeds for full crane operation awareness.



CONSTRUCTION SITE

3 SET SKYTITAN

25X OPTICAL ZOOM CAMERA, MONITOR CONSOLE, AND WIRELESS TRANSMITTER



SITE OFFICE

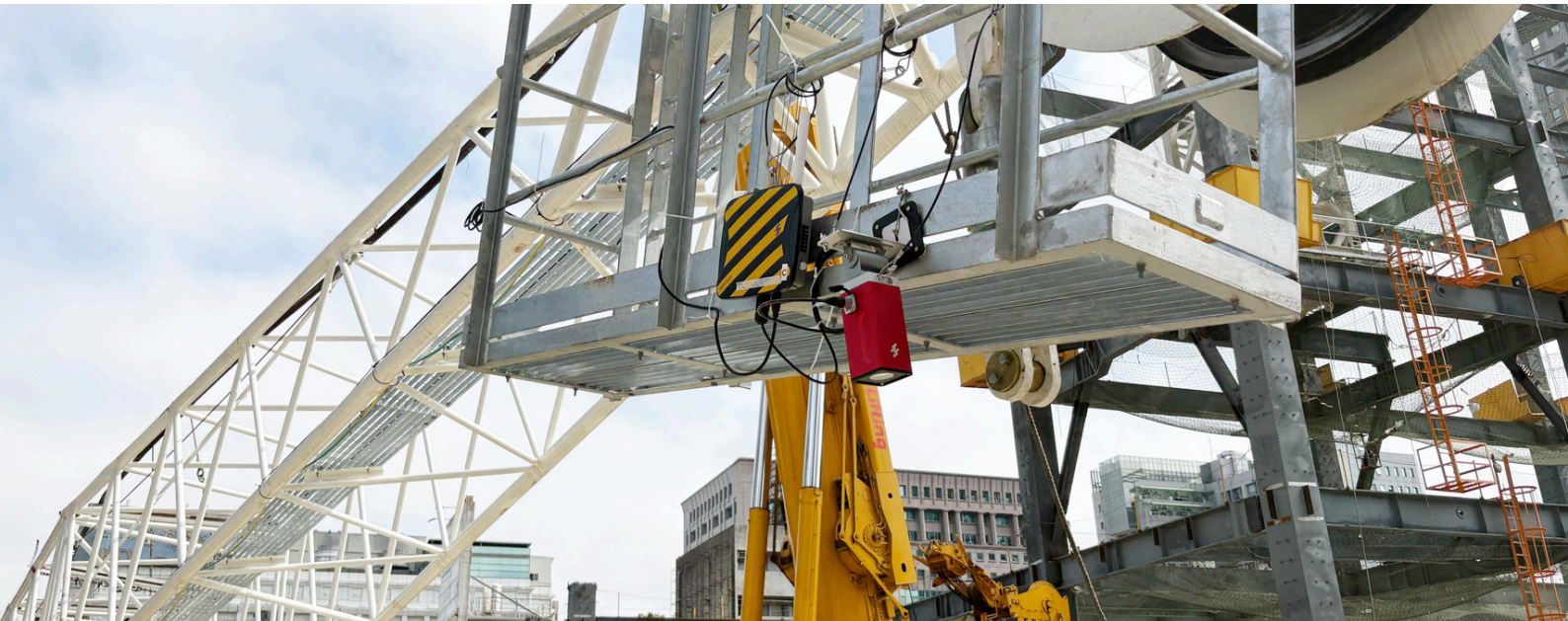
1 MONITOR DISPLAY

LIVE VIEW 3 CRANES OPERATION AT THE SAME TIME

CONCLUSION

With SkyTitan installed, operators could see the loading zone clearly from the cabin — checking hook alignment, load stability, and proximity to other equipment directly on the monitor, without depending on ground crew calls. At the site office, managers had a live view of all three cranes simultaneously on a single display, keeping full oversight of operations in real time.

For construction sites running multiple tower cranes, SkyTitan delivers what matters most. Clear visibility for the operator, and confident oversight for site management. Get in touch to find out how SkyTitan can work on your site.



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.