



Project overview

Client:	PEKKO / VANTAGE DATA CENTRES
Project:	Cyberjaya Campus
Value:	US\$3 Billion
Location:	Kuala Lumpur, Malaysia
Date:	2023 - Current
Usage:	Installation of precast beams and panels

Leighton Asia, part of the CIMIC Group and PEKKO Engineers were responsible for the delivery of the KUL 14 VANTAGE Data Centre building within the 6 acre / 463,000 square ft Cyberjaya Campus, just 8 minute drive from Kuala Lumpur CBD in Malaysia.

The 4 story Data Centre building comprises of hundreds of precast beams and precast panels, lifted into place by crawler cranes.

The challenge

The heavy precast beams and panels require a lot of effort to control, rotate and guide using taglines, and the size of the construction footprint meant that taglines could not be reached by workers, leaving the load uncontrolled.

Using taglines would have required additional staff to be mobilised in restricted areas, working at heights and using elevated work platforms to access the taglines.

The solution

- Removing workers from danger by using Roborigger to control loads instead of taglines.
- Workers no longer needed to rotate the heavy beams using physical exertion, resulting in lower risk of injury.
- Substantial savings were achieved by reducing the required number of workers for the task.
- The heavy beams could be quickly rotated and landed without having to physically access the load. This resulted in quicker progress of the project timeline and financial saving.
- Work could continue in the wet and windy conditions of the Asian monsoon season with the load controlled by Roborigger.

Client feedback

“The safety officers like it because using it can reduce the risk of workers being exposed to the danger of lifting heavy objects for a long time. Additionally, using it ensures the stability of the entire lifting process, solving the problem of the inability to control the rotation of heavy objects when they are lifted high, and workers cannot use a tagline due to wind or wire inertia.”

Calum Wong – PEKKO Engineers

