SmartWorks rides on the powerful 5G network to boost construction safety

「智安建」系統發揮5G網絡優勢 提升地盤安全

The Group is committed to building premium developments and offering superb customer service. In recent years, it has applied innovative technology to different businesses to enhance quality and efficiency. Group subsidiaries Yee Fai Construction and SmarTone jointly developed the SmartWorks system, which uses the 5G network to optimize construction workflow and to enhance the occupational safety and health of construction workers.



Supported by the 5G network, the construction site can use Building Information Modelling (BIM) to present a real-time, highly detailed construction model for engineers to review the design and layout, materials, craftsmanship, etc. 透過5G網絡·地盤採用建築信息模擬(BIM)模型時,可即時呈現高像真度的建築模型,方便工程人員審查設計布局、材質及施工工藝等

Showcasing the beauty of the 5G network

SmartWorks is an end-to-end solution, which leverages the ultra-fast download speed and low latency of the 5G network for better construction safety and operational efficiency. Backed by the cloud and Internet of Things technology, the system adopts image analysis, artificial intelligence and machine learning for complete smart site management to enhance worker safety and operational efficiency.

SmartWorks is now in operation, with its first application at the Group's construction site in How Ming Street, Kwun Tong. Apart from operational efficiency enhancement, SmartWorks is embedded with construction safety features to help prevent accidents and ensure better occupational safety, with programmes such as Smart Helmet, SmartHealth Station, large machine Danger Radar, access control and Environment Station. Site supervisors can also enhance operational efficiency with a one-stop integrated dashboard.

SmartWorks has been widely acclaimed in the industry. In the CIC Construction Innovation Award 2019, SmartWorks received First Prize in the Construction Safety category. The solution is also pre-approved under the Construction Innovation and Technology Fund.

集團致力建設優質發展項目,為客戶提供卓越服務,近年更積極將創新科技應用在不同業務範疇上,以提升質素及效率。集團旗下怡輝建築與SmarTone合作研發「智安建」,系統採用5G網絡,優化建築流程,並可加強保障建築地盤工人的健康及安全。

充份體現5G網絡優勢

「智安建」系統為端對端方案,運用5G網絡的超高速及低時延的特點,來提升建築安全及營運效率。系統以雲端和物聯網技術為基礎,配合影像分析、人工智能及機器學習,推行地盤全面化智能管理,提升工人安全及營運效率。

「智安建」系統目前已投入應用,集團的觀塘巧明街發展項目為首個引入「智安建」系統的建築地盤。除了提升施工效率外,「智安建」系統同時加入許多保障地盤安全的功能,包括智能頭盔、健康監察站、大型機械的安全預警系統、進出管制及環境監察站等,以預防意外發生,提升工業安全。地盤管理人員更可透過一站式綜合平台提升管理效率。

「智安建」系統備受業界肯定,在「2019建造業議會創新獎」中,榮獲建造安全組第一名,亦是建造業創新及科技基金的預先批核方案。



The Smart Helmet has various sensors. If a construction worker falls down, it will send out a real-time alert to site supervisors 智能頭盔內置不同感應器,一旦工人意外下墜,會即時通知地盤管理人員

