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

"智安建"系统发挥5G网络优势 提升施工安全

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.. 通过5G网络·工地采用建筑信息仿真(BIM)模型时,可实时呈现高仿真度的建筑模型·方便工程人员审查设计布局、材质及施工工艺等

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.

集团致力建设优质发展项目,为客户提供卓越服务,近年更积极将创新科技应用在不同业务范畴上,以提升工作质量及效率。集团旗下怡辉建筑与SmarTone合作研发"智安建",系统采用5G网络,优化建筑流程,并还可加强保障建筑工地施工人员的健康及安全。

充分体现5G网络优势

"智安建"系统为端对端方案,运用5G网络的超高速及低延时的特点,来提升建筑安全及营运效率。系统以云端和物联网技术为基础,配合影像分析、人工智能及机器学习,推行工地全面化智能管理,提升工人安全及营运效率。

"智安建"系统目前已投入应用,集团的观塘巧明街发展项目为首个引入该系统的建筑工地。除了提升施工效率外,"智安建"系统同时加入许多保障工地安全的功能,包括智能头盔、健康监察站、大型机械的安全预警系统、进出管理及环境监察站等,以预防意外发生,提升作业安全。工地管理人员更可通过一站式综合平台提升管理效率。

"智安建"系统备受业界肯定,在"2019建造业议会创新奖"中,荣获建造安全组第一名,也是建造业创新及科技基金的预先批核方案。



The Smart Helmet has various sensors. If a construction worker falls down, it will send out a real-time alert to site supervisors 智能头盔内置不同传感器,一旦工人意外下坠,会实时通知工地管理人员