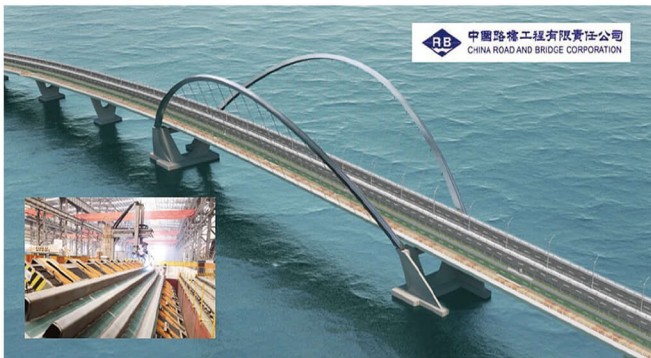


跨地管理數碼化 Digitisation of Cross-Site Management

中國路橋一直走在智慧建築的前端，通過創新及先進科技，包括建築信息模擬、人工智能系統及預製組件建築法等，把工程項目的效率及生產力提升至更高水平。為了進一步實踐智慧建築的理念，我們一直從不同渠道物色合適的產品。現在有了建造業創新及科技基金(基金)的預先批核名單，我們省卻了不少搜尋資料的工夫。在基金的撥款支持下，我們購入Spatial Technology設計的“Novade工程監督數碼管理系統”(預先批核的產品之一)，並應用於將軍澳跨灣連接路項目(NE/2017/07)，用作管理預製組件在內地由生產、裝配、運送以至在香港安裝的整個流程。



將軍澳跨灣連接路 Tseung Kwan O Cross Bay Link

收集大數據 提升工地運作管理能力

將軍澳跨灣連接路的主要結構由84個預製組件組成，涉及超過2 600個部件。Novade 讓我們的工程團隊有效地收集和監控龐大的信息數據。團隊不論在何處，也可隨時追蹤質量監控、執修工作及工程進度報告。此外，工地主管亦可通過主控台進行切合需要的數據分析，並隨時隨地下載實時進度報告撮要，大大提升團隊的項目管理能力。

信息共享 突破時間地域限制

Novade 可讓所有工程數據及分析通過雲端實時同步。先進的數據及圖片壓縮技術令信息傳送更快捷可靠。即使身處的環境 Wi-Fi 訊號接收不佳，亦可使用離線模式，以確保操作無間斷。中港兩地的持分者都可通過電腦或流動裝置隨時隨地分享實時數據，加強兩地協作，讓跨地域監控管理更為奏效。

信息安全 全面監督

Novade 可確保工程數據安全、機密、完整，及可監控。這個監督系統集中收集、處理和分享所有工程項目的數據。數據一經提交和記錄，便不得隨意編輯。系統會自動保留審核記錄和日誌，確保數據易於追溯。

實現環保、無紙化及自動化

Novade 平台亦能協助我們在建築工地進一步實踐環保概念，推動無紙化工序，由填寫檢測表格、提交至審批，整個流程均可線上處理。

總體而言，採用數碼化工程監督系統有助促進生產力和提升效率，以及提早完成工程項目。中國路橋將繼續擁抱創新及先進科技，加速發展智慧建築。

中國路橋工程有限責任公司

China Road and Bridge Corporation (CRBC) has been at the forefront of smart construction. Through the application of innovation and advanced technology, including Building Information Modelling (BIM), artificial intelligence systems, and prefabrication construction methods, CRBC has escalated the efficiency and productivity of our projects to another level. We have engaged multiple channels to look for suitable products to further implement the concept of smart construction. The pre-approved list of the Construction Innovation and Technology Fund (CITF) saves us much effort on data research. Under the CITF's funding support, CRBC has adopted Spatial Technology's "Novade Digital Site Supervision System", one of the pre-approved solutions, in the Tseung Kwan O Cross Bay Link Project (NE/2017/07). It was applied to manage the whole process from production and assembly in the Mainland to transportation and finally installation in Hong Kong.

Big Data Collection to Enhance Site Operation Management

The main structure of Tseung Kwan O Cross Bay Link comprises 84 prefabricated segments, which involves some 2 600 components. With Novade, our engineering team can effectively capture and monitor such large amount of data. Instant tracking can also be done on quality inspection, defects rectification and project progress update regardless of when and where our teams are. Moreover, site managers can retrieve information from customised data analysis through dashboards and download the real-time progress summary report anytime anywhere, thus enhancing our project management capabilities.

Collaborative Information Sharing, No Matter When or Where

Through Novade, all project data and analysis are synchronised real time with the cloud. Advanced data and picture compression technology makes information transmission faster and more reliable. Even in an environment with poor Wi-Fi signals, offline mode is available to ensure uninterrupted operation. Stakeholders in both Hong Kong and the Mainland can share real-time data anytime via computers or mobile devices, thus enhancing collaboration between the two places and achieving more effective cross-region monitoring and management.

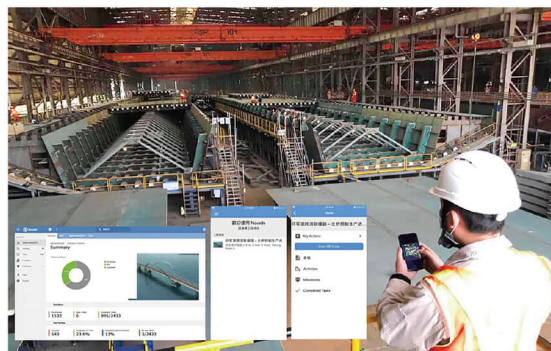
Data Security, Flawless Supervision

Novade assures us of data security, confidentiality, integrity and monitoring. All project data is collected, processed and communicated in this centralised supervision system. Once the data is submitted and recorded, it cannot be altered. The system will automatically keep audited records and system logs to ensure data traceability.

Go Green, Paperless and Automation

Novade helps CRBC further realise the vision of "Go Green" in construction sites – paperless workflow for inspection form drafting, submission and approval via online portal.

To conclude, digitising on-site supervision helps boost productivity, improve efficiency and advance project delivery. CRBC will continue to embrace innovation and advanced technology so as to accelerate the development of smart construction.



Novade工程監督數碼管理系統跨地使用
Cross-site Management by Novade Digital Site Supervision System

China Road and Bridge Corporation