



Maintenance Innovation for Finland's Tallest Bridge

Photo credit: WSP Finland

Project Overview

The Crown Bridge, designed by Knight Architects and constructed by KREATE and YIT, stands as Finland's tallest bridge and an iconic structure in Helsinki. The 135-meter-tall diamond-shaped pylon and the 2 x 250-meter cable-stayed spans are key highlights of this landmark, central to the Kruunusillat (Crown Bridge) project connecting the city center to Laajasalo via sustainable public transport.

Tractel™ was selected for its technical expertise and value-engineering solutions to address the client's need for a cost-effective deck maintenance system. Tractel designed and implemented a rotating underdeck gantry capable of passing through the V-shaped piers, enabling seamless inspection across the bridge's entire length with a single piece of equipment, improving efficiency and reducing maintenance costs.

Innovative Solutions

Installation: To overcome the challenges of limited on-site space and the absence of a crane, TRACTEL developed an original installation method for the gantry.

Digital: TRACTEL worked with BIM technology, based on bridge's digital model, to ensure accurate integration of the underdeck gantry in the bridge unique design.

This project enhances Tractel's ability to deliver innovative, efficient, and sustainable solutions for landmark infrastructure projects.

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Facts & Figures

Commencement	January 2022
Completion of Installation	November 2024
Project Type	Special Projects - Rotating Gantry
Infrastructure Type	Bridge

