



Formwork stripping time halved for Grand Paris Express

Digital service “Concremote” from Doka accelerate construction of Europe's largest transport infrastructure project

Doka, a global leader in formwork and scaffolding, speeded up the concrete work of the Grand Paris Express tunnel construction for Line 15 South, one of four new rapid transit lines, with the application of its time-saving, cost-reducing, safety-enhancing digital service Concremote. Along its 33 km length, Line 15 South will pass through 22 municipalities and affect more than one million citizens when it comes into service in 2025.

The Grand Paris Express (GPE) construction is the largest urban infrastructure project currently underway in Europe. It involves the construction of four rapid transit lines (15, 16, 17, 18) and the extension of the existing line 14 of the Paris transport network. Reliable information about the temperature and strength of the concrete is crucial for a smooth construction process, especially when it comes to highly complex and challenging environments. This is precisely where Doka comes in with Concremote: technology that provides data on temperature and strength development in real-time. Concremote combines the well-established maturity method with modern measuring and information technology. The use of Doka's digital service has enabled the Horizon building consortium, led by Bouygues Travaux Publics, to speed up the concrete cycles by monitoring early-age compressive strength. The digital service allowed formwork stripping after 26 hours instead of the usual 48 hours, saving 22 hours per cycle. Concremote was used in 18 casting steps to monitor the strength of heated concrete. The real-time hard data confirms compliance with quality and strength thresholds.

The Horizon consortium chose to implement the trusted system using two cable sensors 2.0 and thirty lost cables based on its proven method for determining the early-age compressive strength of the poured concrete. The sensors regularly measure the temperature development of the fresh concrete and transmit the data to the Concremote web portal or app. There, reliable and standard-compliant information on the strength development of the concrete is calculated and made available to the construction site in real-time.

Doka's involvement confirms the Austria-headquartered company's commitment to implementing digitalisation to improve efficiencies, optimise budgets, maximise time, reduce the carbon footprint and provide immediate solutions to real-time challenging problems on major construction sites across Europe.

Robert Hauser, CEO of Doka, comments: “As a sustainable partner, we are pushing the expansion of digital services and solutions for the construction industry. As projects become more complex and larger scale, the need to balance traditional methods with mindful construction is imperative. At Doka, we are constantly exploring new opportunities for our customers to increase cost efficiency, reduce CO₂ emissions and enhance safety.” The expanded metro system is designed to support increased sustainability as it reshapes public transport around Paris by more efficiently connecting the communities around the capital. “We are very proud that Doka is participating in such a strategically important project by enabling our customers to embrace the full potential of digitalisation to make their construction processes more efficient.”



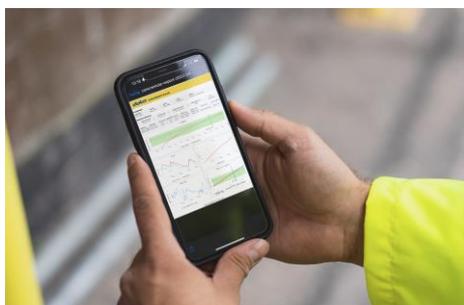
In short:

Project: Grand Paris Express Line 15 South
Location: Paris, France
Type of structure: Tunnel construction
Developer: Société du Grand Paris
General Contractors: Horizon consortium (Bouygues Travaux Publics and Soletanche Bachy)
Scheduled Commissioning: 2025

Construction period
concrete work: May 2021 – 2023
Period of Concremote use: February 2022 – May 2022
Services: Concremote
Used Concremote hardware: 2 x Cable Sensor 2.0 and 30 lost cables
Concrete mixes in use: 1
Number of measurements: 18

Photos:

Please include details of copyright for publication.



The digital service "Concremote" from Doka boosts productivity on the construction site.

Photo: Doka_Concremote.jpg
Copyright: Doka

About Doka:

Doka is a world leader in providing innovative formwork, solutions and services in all areas of construction. The company is also a global supplier of well-thought-out scaffolding solutions for a varied spectrum of applications. With more than 160 sales and logistics facilities in over 60 countries, Doka has a high-performing distribution network for advice, customer service and technical support on the spot and ensures that equipment is swiftly provided – no matter how big and complex the project. Doka employs 6,800 people worldwide and is a company of the Umdasch Group, which has stood for reliability, experience and trustworthiness for more than 150 years.

Press Contact:

Alexandra Weidinger
Head of External Communication
Doka GmbH
M +43 664 62 94 111
alexandra.weidinger@doka.com | www.doka.com