

ENGCON inspires innovative plant solutions

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“When we took on a super-sized project, we turned to Engcon for a super-smart solution!” says Steve Ako, Plant Design Manager at geotechnical specialist, Bachy Soletanche. Two new Engcon EC206 tiltrotators with integral DC2 controllers are part of an innovative drilling system designed and manufactured by Bachy Soletanche for the Thames Tideway Tunnel – the biggest infrastructure project ever undertaken by the UK water industry. The new super-sewer is being constructed to address the problem of overflows from London’s Victorian sewerage system and help the UK meet European environmental standards.

Safety on site

As an existing Engcon customer, Bachy Soletanche already knew how tiltrotators can make excavation easier, faster and safer, even in the most challenging locations, by allowing the bucket or other tool to tilt and rotate. The company bought two EC30/DC2 systems back in 2009 when it won the geotechnical sub-contract for carriageway improvements to the M1 motorway between junctions 10 and 13. The project included soil nailing works as part of the conversion of the former hard shoulder to a peak time running lane. “Because of the potential dangers of working alongside live traffic,” explains Steve, “we needed a really safe and efficient plant solution for stabilising steepened embankments.” Steve and his team applied their considerable engineering expertise to design and build guarded excavator mounted soil nailing rigs. The custom-built rigs incorporate EC30 tiltrotators to enable easy access for nailing from a safe position. “As well as doing a great job, the rigs could be moved quickly between nailing locations,” adds Steve with a smile.

Super-sewer solution

Bachy Soletanche has made its latest investment in two Engcon EC206 tiltrotators to tackle the geotechnical engineering challenges posed by the construction of the 25km long Thames Tideway Tunnel which will run up to 65m below the river. The plant design team identified the need for a solution to handle 3m drill rods while loading and unloading the drilling machine quickly and safely. Once again, Engcon fitted the bill, as Steve explains: “We designed and built a drill rod holder which is manipulated using an Engcon 206 tiltrotator attached to the excavator arm. Successfully installed on site, this bespoke drilling system is proving a fast and efficient solution.”

Smart control

For optimum functionality, all the Engcon tiltrotators used by Bachy Soletanche are fitted with Engcon's DC2 proportional control system. This allows operators to connect their smartphone to the DC2 via Bluetooth and switch between up to four different operator profiles and tools or enter speed settings. Once connected, operators can access Engcon's remote support via a smartphone app to enable troubleshooting and machine calibration to be carried out remotely and immediately, dramatically reducing machine downtime.

Summing up, Steve Ako says Engcon's tiltrotator technology is helping Bachy Soletanche to develop specialist plant solutions that are capable of carrying out geotechnical projects in any location. "The feedback from operators and maintenance staff about Engcon's products and support has been really positive. From our experience, their systems combine quality with reliability and have been well worth the investment."

Source: Engcon