

The UK's first fully electric crawler cranes start work on HS2

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HS2 has moved towards diesel free construction sites with three fully electric crawler cranes arriving at sites in London. It follows the UK's first trial of an electric crawler crane at HS2's Curzon Street Station site in Birmingham last year.

There are only five of these 100% emissions-free, giant Liebherr cranes in the world and three are being used for the first time in the UK at HS2's Old Oak Common site and Canterbury Road vent shaft site. They will cut carbon, improve air quality and reduce noise, making sites cleaner and safer for site workers and local communities.

HS2 recently announced that the project aims to be net zero carbon from 2035, with the target of achieving diesel-free construction sites by 2029. To achieve this, HS2 is collaborating with the industry and its supply chain to accelerate innovation in low carbon technologies, such as fully electric machinery, alternative fuels and renewable energy solutions.

HS2 Minister, Andrew Stephenson said: "HS2 is paving the way for greener and cleaner practices by working towards being net zero carbon from 2035, having diesel-free construction sites by 2029 and

committing to trains running on zero carbon energy from day one.

“Having the UK’s first fully electric crawler cranes begin work on HS2 is the latest step in making these commitments a reality and aligning the country’s biggest infrastructure project with the Government’s ambitions for a greener transport.”

HS2’s Air Quality Lead, Andrea Davidson said: “As a result of HS2’s strict emissions requirements and our move towards diesel free construction sites by 2029, our contractors and supply chain are constantly pushing the boundaries to find ways to cut carbon emissions. We’re delighted that we’re leading the industry by introducing the UK’s first large fully electric crawler cranes, making our HS2 sites cleaner and greener.”

Expanded, a Laing O’Rourke specialist business working for Balfour Beatty, VINCI SYSTRA joint venture (BBVS), has taken two of the UK’s first giant battery-powered electric crawler cranes onto HS2’s Old Oak Common Station site in West London.

The Liebherr LR1250E, a 250-tonne lattice jib crawler crane, and the Liebherr 160 tonne LR1160E both operate emission-free and will be used to construct the 850m long Old Oak Common Station box which will house six high-speed rail platforms.



Environmental Manager at Balfour Beatty VINCI SYSTRA, Mohamed El Shazly said: “As we work to deliver

HS2's Old Oak Common Station, we are continually seeking new ways to minimise our environmental impact and drive down our carbon emissions.

"With only five of these fully electric cranes in the world, we are pleased that two are now operational on our site; testament to the commitment we have made alongside HS2 and our partners to support the UK's transition to Net Zero."

The third crane – a 160 tonne Liebherr LR1160E, has arrived at HS2's Canterbury Road vent shaft site managed by Skanska Costain STRABAG joint venture (SCS JV).

Robert Lockwood, SCS Air Quality Lead said: "At SCS we want to make the transition to electric plant wherever possible in order to reduce emissions and noise, which is crucial for both the environment and the communities around our sites. To keep the momentum going, we're already looking to procure our second electric crawler crane for delivery in March 2022."

The cranes are supplied by another Laing O'Rourke specialist trading business, Select Plant Hire, one the UK's largest equipment suppliers.

Business Unit Leader Alex Warrington from Select Plant Hire said: "At Select we recognise the environmental impact of every action that we undertake, which is why in addition to the investment in our electric cranes we have also invested in a range of electric concrete pumps, MEWPs, new technology tower cranes and hoists which will allow our clients to demonstrate the value of sustainability, achieve energy consumption and zero carbon targets on their projects.

"We're pleased that, as a major infrastructure project, HS2 is driving this forward through the use of our electric cranes on their projects and promoting the zero carbon agenda with its contractors."

Photo credit: HS2 Ltd