

“The engine plant project presented the Royal HaskoningDHV team with a number of challenges ...”

## Driving forward Ford’s centre of excellence

Ford’s Dagenham Engine Plant stands on the site of the company’s original factory which was purpose-built on marshland in 1928 and dubbed ‘The Detroit of Europe’, producing its first vehicle in October 1931.

Adjacent to the Engine Plant is the 30,000 m<sup>2</sup> Dagenham Diesel Centre, Ford’s ultra-modern facility for diesel engine manufacturing in the UK. This new plant is one of the most advanced in Europe.

The Diesel Centre project, led by the SDC Contractor Group and designed by architects Austin-Smith-Lord, occupies in part, a previously undeveloped 10,000 m<sup>2</sup> part of the site. It consists of the engine assembly plant along with a three-storey design office. Royal Haskoning was asked to provide civil and structural engineering as well as CDM expertise.

The initial phases of the project involved the part demolition of existing buildings on a contaminated brownfield site, prior to refurbishment and construction of the new plant and offices.

A critical survey of the existing roof steelwork was performed to establish the strength capacity and condition of the roof members. The roof structure itself accommodates the air conditioning, coolant, compressed air, fire and electrical services.

A major feature of the assembly hall is the use of extensive ‘clean room’ technology, with a state-of-the-art air induction and extraction system to minimise the amount of airborne dust particles that could severely hamper the production of the latest generation of sophisticated, hi-tech diesel engines that Ford produces for customers such as Jaguar, Land Rover and Peugeot.

The engine plant project presented the Royal HaskoningDHV team with a number of challenges, including working around existing structures, accommodating the exacting tolerances of a clean room environment and completing the project within a 18 month design and build timescale.

**Peter Mills**

T: +44 (0) 1733 336104

E: peter.mills@rhdhv.com