Bio-Acrylamide Manufacturing Facility, Bradford, UK

As part of a strategy to strengthen the competiveness of its Performance Products segment, BASF plans to establish a new bio-acrylamide manufacturing facility in Bradford, United Kingdom.

Bio-acrylamides are used in a variety of applications and processes from life science to water treatment and mining. The new facility, which comprises four new vessels, an open structure and two new cooling tower cells will facilitate increased manufacturing potential.

Main contractor JN Bentley was contracted to install a slab structure, subsequent to foundation work and to supervise the installation of the steel frame by a follow-on contractor. Bauer Technologies Ltd tendered and successfully negotiated a subcontract to deliver the foundation work for the project. They mobilised to carry out the work in February 2015. As the foundation work was required to be undertaken while the chemical plant was in operation, the project was not without its challenges. Specifically, Bauer Technologies had to install a number of rotary bored piles in close proximity to BASF's existing chemical storage tanks, which carried inherent risk as well as influencing construction sequence. For this reason, prior to commencing work on the £415,000 project, all Bauer personnel received Client Contractor National Safety Group (CCNSG) training to ensure they understood the risks and could work safely within a petro-chemical environment.

On-site, Bauer Technologies had to quickly and professionally react to changed ground conditions by modifying the envisaged construction method and then optimising performance under the revised constraints. As an example, temporary casings had to be extended from 6m to 15m in order to stabilise unstable mine working voids within the bedrock. By working closely and co-operatively with JN Bentley the disruption and delay to the programme was minimised. Work was completed in early March 2015.

Bauer Technologies used its BG30 and BG40 rigs to drill 880mm diameter piles with rock sockets up to 25m long in Coal Measure Sandstones, Siltstones and Mudstones without any issues. The piling team worked in accordance with the approved Method Statement and Quality Plan to ensure the highest quality, which was subsequently verified by the satisfactory maintained load test and integrity results on all installed piles.

Speaking about the Project and Bauer Technologies' delivery Paul Hearn,

Commercial Manager at JN Bentley, said *"We would not hesitate to use Bauer again and highly commend the whole team involved in this Project for their professionalism and attitude to work".*

Client:
BASF

Principal Contractor:
JN Bentley Limited

Piling Contractor:
BAUER Technologies Limited

Contract Period:
January 2015 to March 2015

Project Value:
£414k

Equipment Used:
- BG40 and BG30 piling rig;
- crawler crane

Bauer's Scope of Works:
- 71nos rotary bored piles, ø880mm, to 29.5m depth
- 1nos pile load test
- Integrity testing

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