

Cairnhill Sun Works Factory

200,000 square foot facility with crane capacity of 150 tonnes



Cairnhill operates within a number of market sectors:



Storage Tanks & Petrochemical



Legacy Energy



High Security



Metalwork



Rail



Steel Framing



Bridges & Infrastructure



Subsea & Offshore



Clean Energy



Marine Renewables

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www.cairnhill.co.uk

Cairnhill is certified to UKCA/CE mark to BS EN 1090-2 up to Execution Class 4. The highest Class Achievable.

Cairnhill is also certified to BS EN ISO 3834: Continual Investment in Quality Requirements for Welding.





CAIRNHILL

**Storage Tanks
& Petrochemical**

Solutions in Steel

Providing steel solutions to the industry

With over 45 years of experience and technical expertise in storage tank manufacturing in the UK and overseas, Cairnhill designs, repairs, maintains, and builds new storage tanks for the oil and gas, petrochemical, energy, and food industries.

Cairnhill Structures offers a wide-range of services for your storage tank projects including design, fabrication, repair, construction and testing of fixed & floating roof tanks. In addition, we can offer tank cleaning, inspection, painting, rope access, hydro-cutting and demolition as part of our project management services and in doing so can deliver your tank refurbishment needs from start to finish.

Our range of services also include structural steelwork, pipework, tank roof seals, valve selection/replacement and control systems.

We ensure your tank repairs and upgrades are carried out in accordance with existing codes and standards (API 650, API 653, BS EN 14015, EEMUA 159).

We take a highly proactive approach to managing health, safety, environmental and quality systems to create and maintain a safe environment at all Cairnhill facilities & projects.

Our HSEQ department audits, monitors and continually improves our management systems which are based on the requirements of ISO 9001, ISO 14001, ISO 45001, and ISO 27001.





Tank B2 Repairs Tradebe

Client - Tradebe

Project Value - £385,000

Project Duration - 16 weeks



Project Scope

The scope of this project encompassed a series of critical works to restore and upgrade the tank systems in preparation for plant operations. The scope involved the complete design, supply, fabrication, and installation of a replacement shell plate measuring 2000 mm x 8 mm x 6287 mm, along with the supply and installation of 80 mm diameter vent pipes, each 10062 mm, complete with top flange detailing. Five untreated fabricated plate baffles, each measuring 645 mm x 8 mm x 9900 mm, were also supplied and installed.

In addition, a new floor stool was fabricated and installed, as well as the complete replacement of the roof support structure, comprising 15 channel sections, and the associated shell brackets and centre support plates. As part of these works, one agitator plate and one center support cover were replaced.

All major lifting operations were carried out by using an 80-tonne crane to ensure safe and efficient handling of components. To verify structural integrity and compliance with quality standards, hydrostatic testing and radiographic inspection were undertaken on all critical welds, with the entire scope of work being restrained to a limited 6-week schedule to align with the plant's reopening.

Project Details

The Tank B2 Repairs project was undertaken on behalf of Tradebe to ensure the operational readiness, structural integrity, and compliance of a key process asset within the facility. The scope covered extensive mechanical and structural repair works within a highly controlled environment, where safety, quality assurance, and programme delivery were paramount.

The works included the replacement of a significant section of the tank shell plate, installation of new vent pipes with flange details, and the fitting of fabricated internal plate baffles to improve fluid dynamics and tank performance. Structural enhancements included the fabrication and installation of a tank floor stool and the complete replacement of the roof support structure, comprising 15 channel sections with associated shell brackets and centre support plates. In addition, one agitator plate “N11” and a central support cover were replaced, with associated mechanical and electrical activities coordinated with third-party contractors.

Due to the restricted access and the size of the components, an 80-tonne mobile crane was deployed to support the safe execution of all heavy lifts. The project was executed to a tight six-week deadline, driven by the requirement to return the tank to service in line with the clients production schedule.

To ensure full compliance and integrity of the works, all repairs were subject to hydrostatic testing and radiographic inspection, providing assurance of weld quality and overall structural soundness. The project was completed on time, enabling Tradebe to recommence plant operations without delay, while extending the service life of Tank B2 and improving operational reliability.

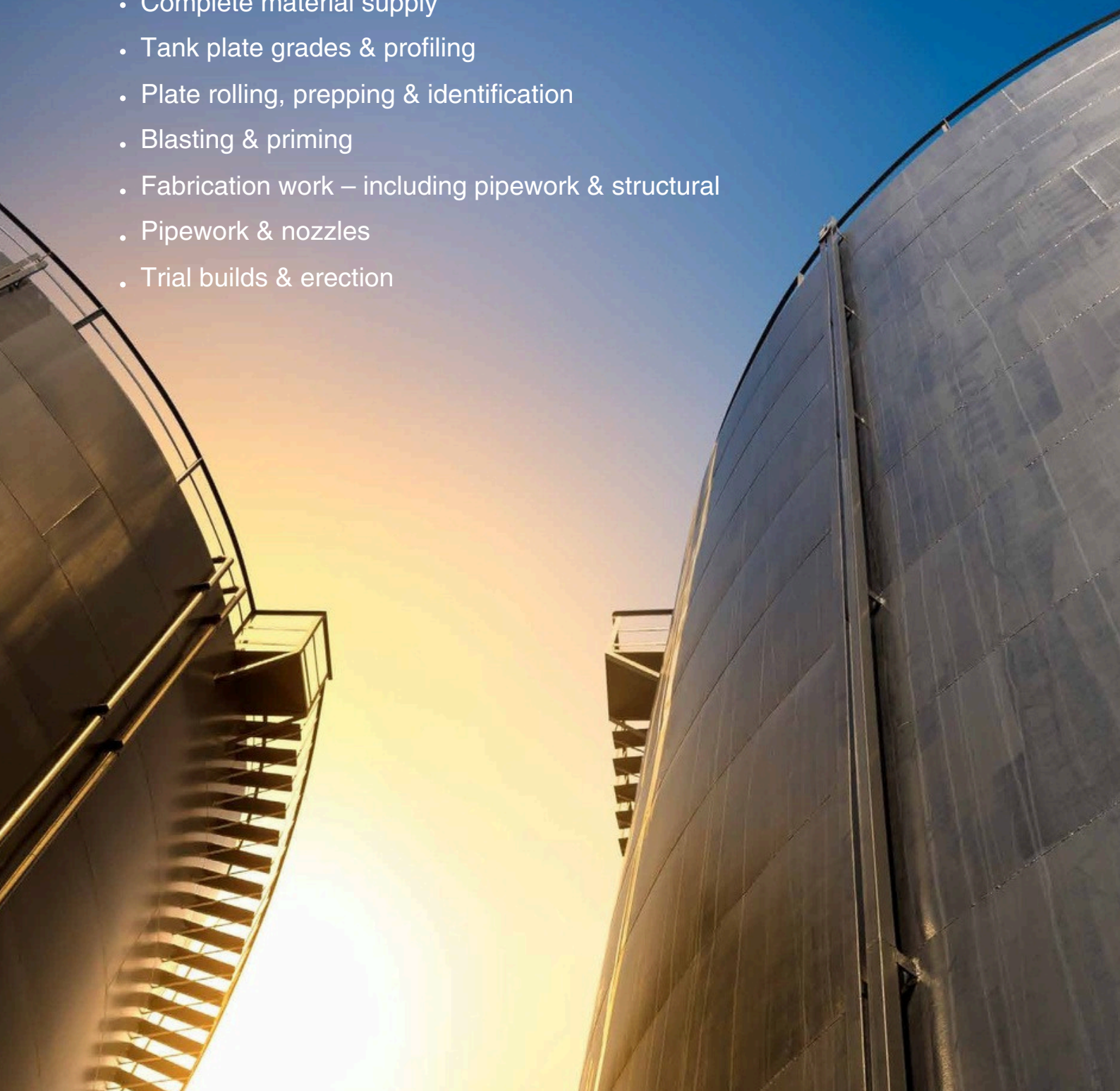


We offer the full supply & fabrication package from our UK manufacturing base allowing us to provide a one-stop solution for all tank operators.

With our 45 years' experience in steel plate & manufacturing processes, we have established procurement routes for all European & Global steel mills, allowing us to offer the storage tank community unrivalled access to the specific grades and quality of steel required.

Our services include:

- Complete material supply
- Tank plate grades & profiling
- Plate rolling, prepping & identification
- Blasting & priming
- Fabrication work – including pipework & structural
- Pipework & nozzles
- Trial builds & erection



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