

# MANUFACTURING & DISTRIBUTION CENTRE



**Client:**

**Faltec Europe Ltd**

**Project Value:**

**£12 million**

**Project Details:**

A bespoke 130,000ft<sup>2</sup> facility for the manufacture and distribution of automotive components. Faltec Europe is the UK division of the Japanese company formally known as Hashimoto. As a key supplier to Nissan, they identified an opportunity to realise efficiencies in the manufacturing process by moving from their multiple building plant in Boldon to a single purpose-built facility adjacent to the customer's Sunderland assembly plant.

The project was the second development on the International Advanced Manufacturing Park in Sunderland and manufactures vehicle trim components for numerous vehicle manufacturers throughout Europe, including Nissan.

Portland worked collaboratively with the Client, Contractor, Architect, Process designer, M&E designer and machine suppliers to provide a bespoke 130,000ft<sup>2</sup> building at the Advanced Manufacturing Park in Sunderland.

As the estate infrastructure was still in development Portland also worked alongside the estate infrastructure designer to coordinate and maximise SUDS opportunities.

Subsequently Portland have provided engineering services for the Injection Moulding machine installations, silo installations, service yard extensions, loading canopy installations and modifications to equipment relocated from the previous plant.

The manufacturing process dictated the following brief:

- 130,000ft<sup>2</sup> production building with several cranes, logistics/warehouse area and an ability to be expanded to provide a further 130,000ft<sup>2</sup> of production space.
- External service yards and marshalling areas
- Car parking
- Pellet silos
- External loading canopy
- Injection moulding machines installations
- Decant and reinstall of equipment in the existing facility, including structural modifications to the gentries etc

In addition, in line with the developers guide for the estate and LLFA requirements a significant SUDS obligation was observed.

The building was heavily serviced and had several overhead cranes of up to 40t safe working loads. Portland worked with the process designers to optimise the layout of the structural frame to facilitate the cranes in an economical manner and devise service 'highways' that were strategically located to minimise the impact on the building frame. Cabinets and control panels were located on mezzanine structures cantilevering from the main frame to maximise valuable floor space below.

We also carried out a detailed analysis on the floor slab to enable the 'toolings' to be stored in an optimal manner and also to negate the need for discrete foundations to the injection moulding machines by undertaking a settlement analysis of the floor slab.

Surface SUDS was an important theme in the estate masterplan and we were able to continue this theme by utilising potentially sterile areas of the site for detention basins and conveyance swales, this also ensured the expansion capacity of the building could be realised.

