

TNT FastTrack, Magna Park, Lutterworth

TNT UK Ltd urgently required a large distribution facility for their subsidiary TNT Retail Services to service Primark, the fashion retailer trading from 103 high street locations in the UK. TNT were convinced that fitting out an existing building would be the only option open to them. The ideal solution would be a bespoke facility, an option now available to clients through FastTrack.

FastTrack is the name of Gazeley Properties' new concept in distribution developments – a fully operational facility in 10-12 weeks. The TNT project demanded a 412,000 sq ft facility to be operational in 12 weeks. 40 weeks is a typical build programme for a bespoke building of this size.

The project

- Design and build a 1600 tonne steel framed distribution facility.
- Three and a half week erection programme, compared to a normal 15-week programme.
- The project's success rested on the steelwork contractor's ability to meet this programme. Follow-on trades required carefully phased handovers – the first after just four days, to start cladding.
- Steel – the only material capable of meeting such a demanding programme.
- "Speed engineer" to maximise on-site production; a shift from traditional minimum weight design.
 - reconfigure the building layout, span frames to maximise the working fronts during erection.
 - rationalise the number of cold rolled items, they require the most restraint by ancillary items and slow down erection progress.
 - robust members require fewer restraints and are faster to erect.
 - minimise the number of pieces to erect.
 - reduce time working at high level to increase safety.
- Detailed design development commenced just six weeks before the steelwork was due on site, the 3-D model progressing in tandem.
- Supply chain ethos was essential. The programme was not achievable through traditional tendering means.
 - Gazeley partnered their supply chain.
 - an opportunity to showcase three years work on the steelwork contractor's supply chain: steel, erection, paint, bolts, transport, cold rolled purlins and rails were all partnered.
- Work with associates (eg the cladders, door and dock door company) pre-agreed – standard details were used to speed up design and drawing and eliminate interface problems.
- Effective project management the key.
 - Meticulous planning of the 85 loads, delivered every two hours in erectable lots to a site team of 30 men, four cranes and 16 cherry pickers.

The results

An extract from an on-site diary at the end of week four of the building contract read: "The steel frame is blitzkrieging its way across the field, the Barrett boys have had a fantastic week's production – 800 tonnes of steel erected, lined and levelled since they started seven days ago. We believe that this rate of production is a European, if not World, on-site production record for a portal framed building of this type. The organisation from factory through delivery to erection is as slick as can be."

By day 20 the entire 1600 tonne building was handed over to the main contractor, beating the programme by five days. This was achieved without compromising the most important factor on any building site, safety. Ground conditions were close to perfect, the most important factor in safe erection of steelwork.

Exactly 12 weeks to the hour from when the first foundation was dug, TNT's vehicles were being unloaded.

This project is a case study in the unique properties of steel allied to effective supply chain management, both are key to a successful outcome of a unique challenge and a satisfied client.

Judges' Comments:

A powerful team effort, which delivered a remarkably fast project, necessitated by the demands of a distribution business, but with no compromise in quality. A finely engineered solution, only possible in steel.

Industrial Building Award

Architect
Chetwood Associates Ltd

Structural Engineer
Burks Green

Steelwork Contractor
Barrett Steel Buildings Ltd

Main Contractor
UKGSE

Client
Gazeley Properties Ltd

