

The "Pepsi-Max Big One" Rollercoaster, Blackpool Pleasure Beach

For: Blackpool Pleasure Beach Ltd



Architect:
(Station design only)
Fiona Gilje in association
with Phillip England

Structural Engineers:
Arrow Dynamics Inc
and Allott & Lomax

Steelwork Contractor:
Watson Steel Ltd



The world's tallest and fastest rollercoaster was opened to the public in May 1994 - after an intensive 3-year research, design and construction programme. It has rapidly become an icon of the UK tourist industry, the exposed steel structure dominating the skyline of Blackpool and drawing large numbers of additional visitors to the Pleasure Beach itself.

Detailed design commenced with topographical and site investigation surveys during the 1991/92 close-season. Construction proper took place over the following two winter shutdowns, with a piling and substructure contract in 1992/93 and the main superstructure and ride completion in 1993/94.

Structural steel was selected for the track itself, the support structure, and the station structure for three key reasons:

- Proven quality of steel tracks on previous major rollercoaster rides.
- The necessary high degree of accuracy required for the safe dynamic performance of the ride.



Only 16 weeks on site during the 1993/94 winter close-season was allowed for construction for the entire structure.

The steelwork main contract was completed on time and below the original tender value; as the largest individual contract (£5.2 million, 40% of the total ride cost) this made a major contribution to the success of the whole project.



Judges' Comments:

A spectacular new landmark in Blackpool. The route planning, technical and logistical challenges of creating this world beating ride within a working park were fully met by the effective combination of standard components and custom designed steelwork.