







Toyota car plant, Burnaston, 2006 (under development)

## **CASE STUDY - TOYOTA**

Client: Toyota New Car Plant Burnaston - Derbyshire

Customer: Haden Young and Drake & Scull Engineering Ltd

Consultant: Ove Arup & Partners

**Products:** Expansion Joints - Restrained Type

Toyota Manufacturing UK is the UK manufacturing operation of Toyota, established in December 1989. The vehicle manufacturing plant at Burnaston, Derbyshire, assembles cars. The first car off the production line was a Carina on 16 December 1992. Since then production has included Avensis, Corolla and Auris models. An engine manufacturing factory is located on Deeside, North Wales. As of August 2014 the two factories employ 3,800 staff.

The processes at Burnaston include stamping (pressing panels from rolls of steel), welding, painting, plastic mouldings (bumpers and instrument panels/dashboards) and assembly and at Deeside machining, assembly and aluminium casting.

In 2006 Toyota Manufacturing announced an investment of £100 million to build the Auris in the UK. On 26 February 2007 Chancellor Gordon Brown visited the Burnaston plant to celebrate the official launch of the new facility, where at it fastest speed a car can come off the end of the production line approximately every 60 seconds.

Pearwalk Engineering's Thermosel® range of articulated expansion joints were used extensively throughout this project.

Pearwalk Engineering were involved at the design stage, providing advice on the application and installation of expansion bellows. Drawings were draughted to show the recommended location of bellows, pipework, anchors and guides to accommodate **thermal**, **seismic** and **ground settlement**. Double tied, flanged expansion joints were supplied throughout the site to all services.

All products were supplied to Toyota UK on the fast track delivery schedule.

Pearwalk Engineering provided a complete design service on all Thermosel® products. This included technical advice, site surveys and after sales support.

