



58 Test Bed Rolls-Royce, Derby

Cullum and Rolls-Royce have worked in close partnership to build Rolls-Royce's largest and most advanced Test Bed.

58 Test Bed is located at Rolls' Derby headquarters is used for the developmental testing of large engines such as the Trent series and engines with fan sizes up to 140". The facility can carry out 'fan blade off' tests, 'bird ingestion' tests and 'cold start' tests.

Cullum constructed the building and supplied many of the electrical and mechanical systems.

Cullum's experience in providing jet engine test facilities and strong relationship with Rolls-Royce made us the ideal partner for this project. As one of our most ambitious projects, Cullum are justifiably proud of 58 Test Bed.

Did you know... it took 11,000 m³ of concrete, 1000 tonnes of reinforcing bar, 26,000 m² of wall beams and decking, 300 tonnes of intake silencing elements and

700 tonnes of exhaust silencing elements to complete 58 Test Bed.

Customer

- **Rolls-Royce**

Systems Cullum supplied:

- **Air intake: capable of taking in 4 tonnes/sec of air, with a flow straightener built in to provide even, laminar air flow.**
- **Cell doors: fully automated and rail mounted, weighing 80 tonnes each.**
- **Engine transport system: fully automated overhead system from the adjacent rigging shop to the overhead thrust stand.**
- **Exhaust stack: 30m high and with advanced acoustic suppression**
- **Support systems: All fire protection systems, fuel lines, data acquisition systems and many of the electrical systems.**