

Millau Viaduct

On the highway A75, across the river Tarn, near Millau, Aveyron (FR)



General studies mission, execution studies of the metallic structures, assembly and means of execution studies

Owner
Compagnie Eiffage du Viaduc
de Millau

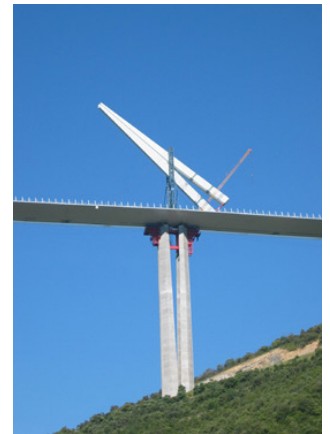
Designer
Michel Virlogeux

Cost of the works
€ 350 M excl. vat

Studies
2000 - 2004

Execution
2001 - 2004

OA



Multi-cable-stayed viaduct with 8 spans, of overall length 2,460 m, located in a site presenting severe geographical and climatic conditions: steep valley, strong winds with high speeds and turbulence.

The superstructure is entirely of steel: deck with an orthotropic plate (width 28 m, height 4,20 m) and 7 pylons (90 m high). Total steel weight: 50,000 tons.

The bridge was launched from both sides of the valley in a triple world record: launched in spans of 171 m, at a highest point of 280 m (junction above the river Tarn) and a total weight of 20,000 tons on the last launch. The highest temporary support was 175 m high.

Competition : complete study and development of the launched steel solution (winning solution).

Construction design : global and wind calculations, calculation of launching phases, design and calculation of the deck, pylons and stay cables, design of equipment, construction methods and temporary works, assistance with launching operations, assembly and installation of stay cables.

Awards :

- IABSE 2006 Outstanding structure award
- FIB 2006 Award for Outstanding Concrete Structures
- ECCS 2005 European award for Steel Structures