

# **Millau Viaduct**

## LONGEST



Brief	Information	Guiding	
The Millau Viaduct is part of the A75-A71 Freeway from Paris to	- Country : FRANCE	Nearest Airport:	
Montpellier, and is located in the Aveyron départment in southern	- Height : 340m	- Charles de Gaulle airport (CDG)	
France. It is the highest bridge in the world, standing 270	- Length : 2.460m	- Nice-Cote (NCE) International Airport	
meters (890 ft) over the Tarn River and is more than 340	- Year Built : 2001	Nearest Bus station:	
meters (1,125 ft) in height at the	- Number of visit per year :	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
top of its highest mast. It is	5.000.000	- Aguessac Bus Station	
slightly taller than the Eiffel		- Hôpital Fenaille Bus Station	
Tower in Paris and only 38			
meters (125 ft) shorter than the			



Empire State Building. It is a cable-stayed road bridge designed by engineer Michel Virlogeux and British architect Norman Foster.

See more: https://en.wikipedia.org/wiki/Mill au Viaduct

The Millau Viaduct was designed by British architect Norman Foster and French bridge engineer Michel Virlogeux. This bridge was once considered the tallest in the world. The bridge is the pride of the French and is known as the perfect new wonder of France, attracting quite a few tourists to visit.

## **History of Millau Viaduct**

The Millau Bridge is part of the A75-A71 road traffic axis from Paris to Béziers, connecting the two plateaus of the Massif Central mountain range. across the river Tarn, connecting two plateaus at great distances. With a total length of 2,460m, the solution offered is to design a bridge with 7 pillars, the length of each bridge span is up to 342m, and the pillars have a height of 75 to 235m.

According to the design, 7 Millau piers are constructed of reinforced concrete in the shape of a pyramid, inverted V, and the conductor resembles half a harp. The cables are arranged as close together as parallel by anchoring the cable ends to different points of the tower so that there is as much distance between the cables attached to the tower as the close distance between the component cables below attached to the tower, positions on vertical, vertical by the path.

Due to the high level of Millau, the road is not designed to be flat because this can cause a feeling of floating for the driver. To solve the problem, the bridge is designed with a slightly curved structure, inclined by about 3% to improve visibility and create a comfortable psychological feeling. Each side requested to design a 3m wide corridor to increase safety and help drivers not see the valley below. According to calculations by Norman Foster, when the bridge is exposed to strong winds of 151 km/h, a secondary shield is used to reduce the impact of the wind by up to 50%. So the wind speed on the bridge is similar to the wind speed on the ground.

The construction process used hundreds of hydraulic cylinders and high-performance pumps to guide and fix the surface and a synchronized upgrade system of auxiliary columns. Millau Viaduct is the result of 17 years of ideas from people who imagine, propose, and designed, after construction is complete. Le Viaduc de Millau broke 3 world records: The world's tallest bridge tower with towers P2 and P3 respectively 244.96m and 221.05m high; The tallest column in the world with the top of tower P2 343m high; and the highest bridge deck in the world at 270m above the river Tarn (at its highest point). It's almost double the height of the previous highest claim in Europe. To build Millau Bridge, people had to use about 127,000 m³ of concrete, 19,000 tons of concrete, and 5,000 tons of steel. In total, the bridge weighs about 290,000 tons.

Norman Foster is known to mankind as a genius in world architecture. Not only is he always coming up with unique and suitable architectural ideas for each specific location, but he is also at the forefront of applying new technologies to his products. Critics have commented that Norman Foster's design

concept is more than a utopia, it is like a magical dream about space. He once said: 'Architecture is associated with people and quality of life. Architecture cannot exist on its own. We must create buildings that are technology and culture...'. Therefore, his creative works are always one of the very unique and always pioneering products in the field of construction, Le Viaduc de Millau is living proof of that philosophy.

#### The goal of this construction

Whenever we come across a work like this, there is a goal or an end. In this case, it was that they wanted to avoid the rather complicated part of Tarn and Millau

Because here often see a lot of carts passing by, especially at the time of tourism and public holidays. Thus, thought was made to merge Paris with the Mediterranean region of Béziers. So nearly 400 million was put on the table so that the Millau Water Bridge could be built.

### Map Location

