



Video/ Slide show

You will see a film about the construction of bridges.

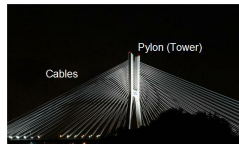
There are various types of bridges. They serve different purposes, are built to withstand different climatic conditions, and their appearance may vary.

Slab bridge – in which the bridge span, in other words the structure linking the bridge's two supports (columns or pillars), consists mainly of a deck, which performs the function of the main girders (transferring the load of the bridge onto columns). This means that loads such as the weight of the bridge itself (the "dead load") and the weight of variable loads (e.g. road vehicles, people, bikes, called the "live load") can be conveyed through the bridge deck.

Beam bridge – the most popular and most frequently applied solution in bridge building. The spans, in other words the structures connecting the two supports of the bridge, are composed of beams or slabs, supported on columns located in the river stream. It is essentially the simplest structure and usually the cheapest solution in bridge construction.

Arch bridge – this bridge contains an arch – it is main structure of bridge, which is supported on columns (piers) and abutments, i.e. the outermost supports of the bridge. Abutments are located on the banks of the river, whilst the columns (piers) are usually located in the river stream, or in the floodplains. We can distinguish between two types of arch bridges: a through arch bridge (arch above the deck) and a deck arch bridge (arch or arches below the deck).

Truss bridge – in which the main girder (carrying the bridge's load) is a truss – a system of straight and rigid rods, joined together to form a structure based on triangular units. The basic principle behind this type of bridge is a desire to reduce the necessary materials to a minimum while at the same time maintaining the required rigidity.



source source source



source