



## YAVUZ SULTAN SELIM HYBRID BRIDGE (3.BOSPORUS BRIDGE)

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Within the context of this study, the presentation of Yavuz Sultan Selim Bridge, with it the Bosphorus will be crossed for the third time and whom construction has been started, will be discussed with its structural properties.

The Yavuz Sultan Selim Bridge, whom construction has been started at 2013 and planned to be finished at 2015 is located on the Odayeri – Paşaköy part of the Northern Marmara Motorway Project. The railway system on the bridge will carry passengers from Edirne to İzmit. The Yavuz Sultan Selim Bridge located on the Northern Marmara Motorway will be constructed with Build-Operate-Transfer system. 8 lanes of motorway and 2 lanes of railway will be located at the same level. The main span of the bridge will be 1.408 meters while the total span will be 2.164 meters. The Yavuz Sultan Selim Bridge will contain 59 pieces of steel segment and will be constructed as a hybrid-cabled-system bridge with 176 stiffening cables and 68 hangers. The tower legs whose height will be around 322 meters will be constructed with reinforced concrete. The steel deck will be on 71 meter above sea level. The Yavuz Sultan Selim Bridge, which will be one of the special bridges all around the world both with its technical and esthetical properties, will hold the following firsts and the bests:

- The widest suspension bridge of the world with its 59 meters width,
- The longest suspension bridge that includes railway system integrated with its 2.164 meters total span and 1.408 meters central span,
- The suspension bridge having the highest tower height of the world with over 322 meters,
- The very first bridge that a 8-lane motorway and a 2-lane railway will be on the same level.

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