## Hangzhou Bay Bridge



Hangzhou Bay Bridge (simplified Chinese: 杭州湾大桥; traditional Chinese: 杭州灣大橋; pinyin: Hangzhou Wān Dàqiáo; Wu: Han-tseu-uae du-jiau) is a long 35.7 km (22.2 mi) highway bridge with two separate cable-stayed portions, built across the mouth of Hangzhou Bay in the eastern coastal region of China. It connects the municipalities of Jiaxing and Ningbo in Zhejiang province.

Sure, here is a summary of the Hangzhou Bay Bridge in three parts: history, construction, and design.

## History

- The Hangzhou Bay Bridge is a cable-stayed bridge that connects Shanghai and Ningbo, China. It is the longest sea-crossing bridge in the world, with a total length of 36 kilometers (22.4 miles).
- The bridge was designed by a team of Chinese engineers led by Su Junliang.
  Construction began in 2003 and was completed in 2008.
- The bridge was opened to the public on May 1, 2008. It cost 11.8 billion yuan (US\$2.1 billion) to build.

## Construction

 The Hangzhou Bay Bridge is made of concrete and steel. The concrete piers are hollow shafts that were built layer by layer. The steel deck was constructed in sections and then lifted into place.

- The bridge has 820,000 tons of steel and 2.45 million cubic meters of concrete.
- The bridge was built using a variety of techniques, including traditional construction methods and innovative new technologies. For example, a special type of concrete was used to resist the corrosive effects of the seawater.

## Design

- The Hangzhou Bay Bridge is a graceful and elegant structure. The pylons are slender and tapered, and the cables are thin and delicate. The bridge blends in with the natural landscape, and it does not dominate the surrounding area.
- The design of the bridge was inspired by the surrounding mountains and the waves of the sea. The pylons are shaped like mountain peaks, and the cables resemble waves.
- The Hangzhou Bay Bridge is a marvel of engineering and design. It is a symbol of modern China and a testament to the ingenuity of its builders.