



Ever since the early 2000s, China transformed its industrial capabilities to such levels that they quickly started building massive public and industrial transport lines that connected their major industrial hubs one to another. While rail transport received much of attention in this period, public transport was also reborn with the incredible capabilities of Chinese companies to create bridges of all shapes and sizes. This revolution of bridge building enabled the creation of not only hundreds of bridges in mountainous areas but also bridges that were created over land.

After many projects that started breaking bridge-building records from all around the world, Chinese government elected to bring to reality one of the most impressive bridge ever conceived – a railroad bridge that will connect the city of Shanghai with the town of Nanjing, the capital of East China's Jiangsu province. To achieve this great feat, designers of this bridge had to create a project that would accommodate not only immense size of this project that required creation of a bridge that is over 100 miles long, but also to be built in an area that had land features such as rivers, lakes, canals, lowland rice paddies and uneven terrain. Final designs of the bridge were ratified in early 2006 when first work started.

The building of the Danyang–Kunshan Grand Bridge lasted four years, using the workforce as strong as 10 thousand people and resources that reached the cost of \$8.5 billion. While the bridge itself was finished on November 15, 2010, the grand opening happened in June of 2011 when first public transport was allowed on the bridge. In its final form, it is 164.8 kilometers long, has a span of 260 feet and average height from the ground of around 100 feet (31 meters). At the moment of its finishing ceremony, it easily broke the records of all other bridges, including the largest water bridge in Louisiana (24 miles long Lake Pontchartrain Causeway). For the most way, it follows the flow of Yangtze river, between 5 to 50 miles (8 to 80 kilometers) on the south of it.

While the entire railroad network spans that impressive size, the Danyang–Kunshan Grand Bridge is also known for its individual parts that are used by the people living in the populated areas that are covered by the bridge (cities of Shanghai, Kunshan, Suzhou, Wuxi, Changzhou, Zhenjiang, and Nanjing). For an example, rail transport segment of Danyang–Kunshan named Langfang–Qingxian

viaduct covers the distance of 70.8 miles (114 km) making it a second largest bridge in the world. Another notable part of the bridge is its 5.6 miles (9 kilometers) section that goes across open waters of Yangcheng Lake in Suzhou. This section was built on top of 2000 pillars, steel cables and impressive 450,000 tons of steel structure. It has been constructed so sturdy so it can withstand not only natural disasters such as typhoons and magnitude eight earthquakes but also direct impacts from naval vessels that weigh up to 300,000 tons.