# ARCO DEL BICENTENARIO BRIDGE



## ARCO DEL BICENTENARIO BRIDGE

#### Location

Bogotá, Colombia

#### Client

Gobernación de Cundinamarca

#### Contractor

Consorcio Infraestructura Cundinamarca Constratista

#### Scope of work

Design, fabrication and installation of steel structures

#### Period of execution

2012

#### Weight

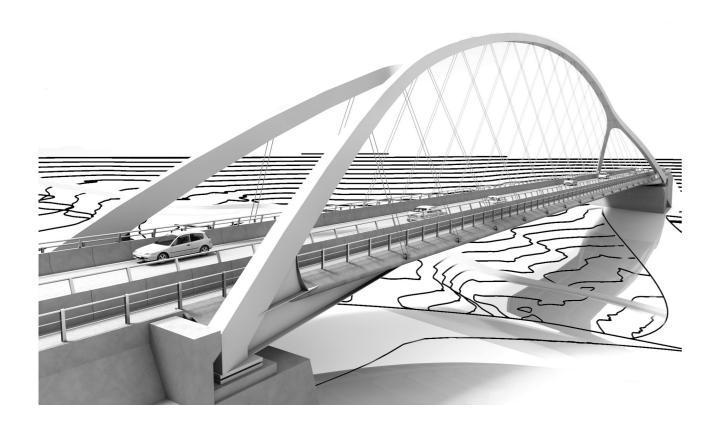
760 tons

#### Length

140 meters

Between 2010 and 2011 the Tequendama region has suffered frequent storms and consequent landslides, making the soil shaky and unstable. Compared to concrete, the construction of a steel structure allows to reach a greater depth of the piles - up to 30 meters - balancing the instability of the ground and absorbing vibrations.

The Arco del Bicentenario Viaduct celebrates the two hundred years of independence of the Cundimarca region (one of the 32 departments in Colombia). This viaduct consists of a deck made of S355JOW steel with a length of 140 meters and a width of 11 meters, supported by a bifurcated arch made of S355J2 steel with a total weight of 766 tons. The viaduct is supported by two pillars with depth between 25 and 30 meters and with a diameter of 1.5 meters to counterbalance the



instability of the ground and absorb vibrations. The arch was assembled on the ground with the help of temporary equipment and, once completed, positioned and supported by a system of temporary cables that, hooked to a

temporary tower placed on each end of the bridge, unloaded their weight on counterweights. After the installation of the key element, joint have been welded completing the installation.



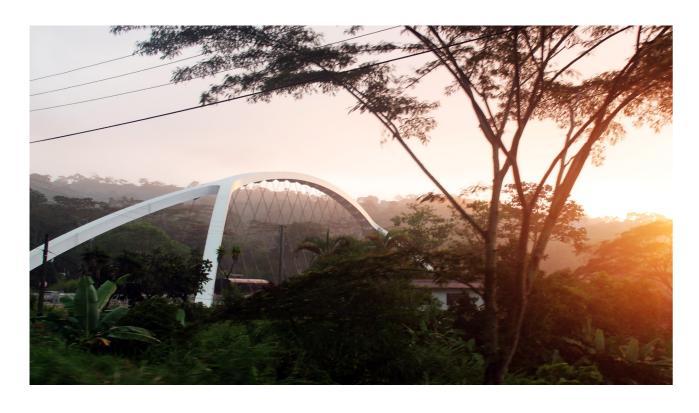


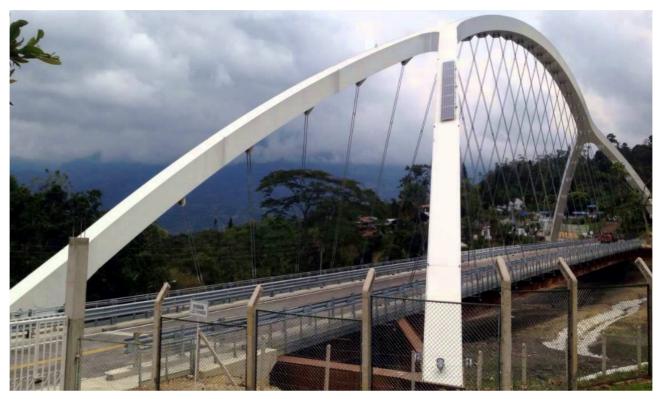












9 - 10 BRIDGES & VIADUCTS > ARCH BRIDGES > ARCO DEL BICENTENARIO BRIDGE



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