SHINDAGHA BRIDGE

3 - 4 BRIDGES & VIADUCTS > ARCH BRIDGES > SHINDAGHA BRIDGE

SHINDAGHA BRIDGE

Location

Dubai, United Arab Emirates (UAE)

Client

Road & Transport Authority (RTA)

Contractor

Belhasa Six Construct LLC

Scope of work

Design, fabrication and installation of steel structures

Period of execution

2019-2021

Weight

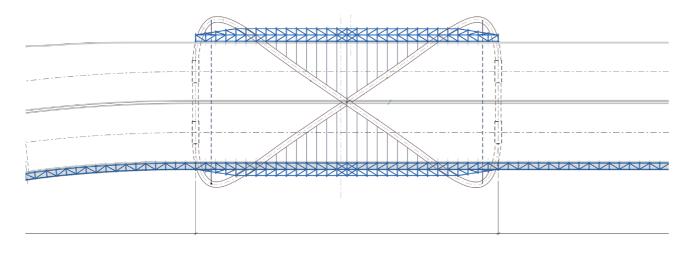
2.500 tons

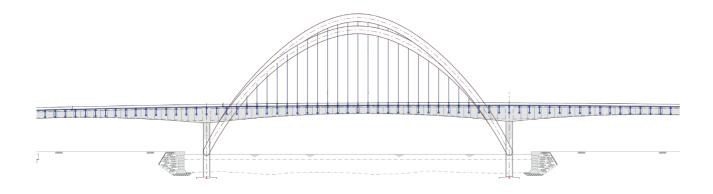
Length

135 meters

The 12-lane deck of the Shindagha Bridge is made of concrete while the iconic arch, also referred to "infinity arch" for its architectural shape similar to the mathematical symbol for infinity, is entirely made of steel. The project is part of the Shindagha Corridor, a 13 kilometres extension to improve the traffic flow in on of the most ancient neighbourhoods of the city, also welcoming the maritime traffic at the entrance of the Dubai Creek.

The steel arch is made of 46 segments reaching a height of 67 meters and span length of 135 meters and, in its final geometry, it had only 20mm of tolerance from the theoretical development. Its installation was split in two phases: in the first phase, 10 arch ribs have been



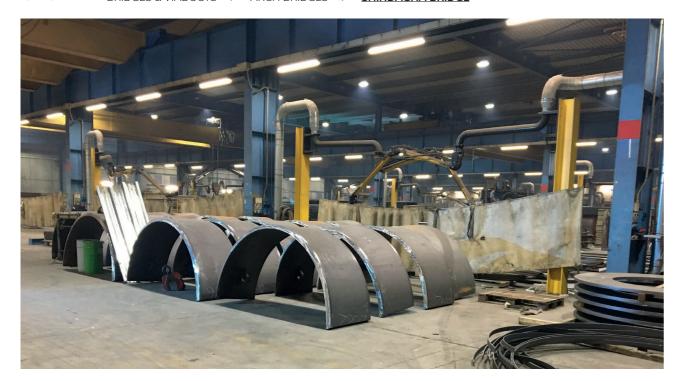


installed by 600ton crawler crane and were partially embedded in the concrete piers to allow then the completion of the concrete deck, starting then the second phase with the erection of macro segments of around 100 tons and 41 meters length by using a 600ton crawler crane standing on a barge. Arch segments were placed on 35 meters tall

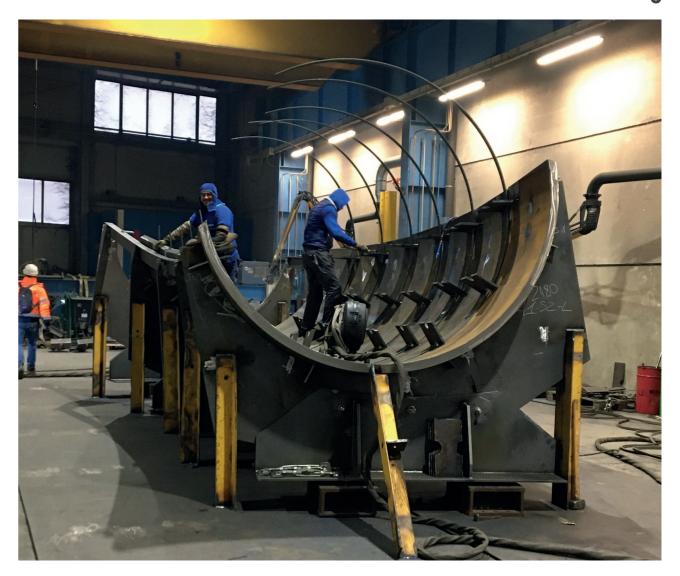
temporary towers, four of which placed inside the water, four above the pier protection system composed by piles and five above the deck. The final surface layer of the painting treatment of the arch is quite particular and gives a silver metallic aspect to the structure.







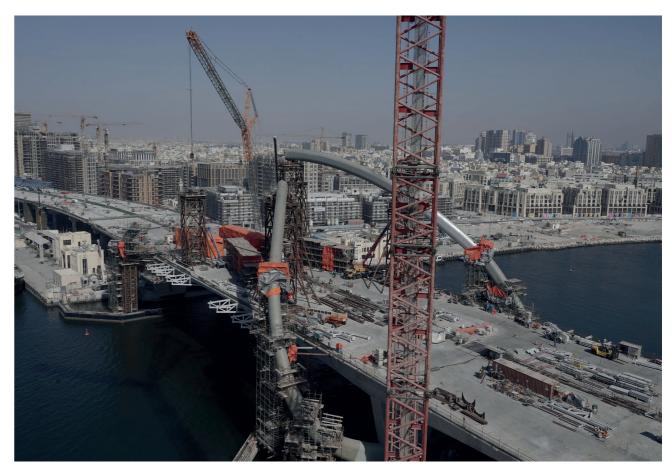






7 - 8 BRIDGES & VIADUCTS > ARCH BRIDGES > SHINDAGHA BRIDGE







9 - 10 BRIDGES & VIADUCTS > ARCH BRIDGES > SHINDAGHA BRIDGE



ldeas **shape** the World