



Forth Replacement Crossing / Queensferry Crossing Bridge



Description

Six traveller steel frames are being used to lift bridge decks from barges into position at the construction of the world wide longest three-tower cable-stayed bridge over the Firth of Forth in Scotland.

Hebetec provided independently working strand jack- and hydraulic systems and control units for the liftings and traveller moving. Hebetec further supervised installation and executed the system operation.

The lifting system had to reach high lowering and lifting speeds to comply with the local conditions, as well as the control system needed to be executed with pressure- and distance variation monitoring.



Facts

Total bridge length:	2'700 m
Bridge decks:	109 pcs
Weight per deck:	266 - 784 t
Total segment length:	1'692 m
Required lowering speed:	35 m/h
Required lifting speed:	20 m/h

Handling equipment

H-580 with CP:	12 pcs
PA-4-30/FU:	12 pcs
Strand-recoiler:	12 pcs
Double acting hydraulic cylinders with 35 – 225 t capacity and 150 – 1200mm stroke	72 pcs
Independent control systems	6 pcs

