



SIKA AT WORK

RASHID BRIDGE upgrading

REFURBISHMENT : Sika Carbodur® S1012 , SikaWrap®-300 , Sika Wrap®-430G , SikaWrap® FX-75C , Sikadur®-30LP , Sikadur®-330 , Sikadur®-41CF Sikagard®-550 W Elastic

BUILDING TRUST



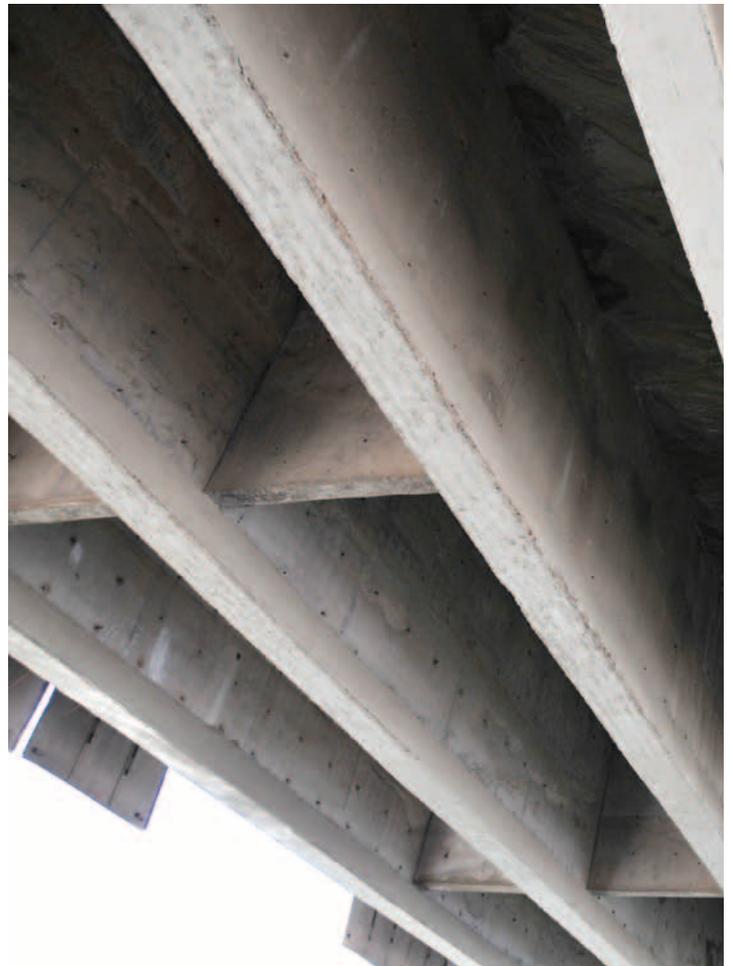
RASHID BRIDGE

PROJECT DESCRIPTION

- Rashid Bridge is part of the international coastal road and crosses the Nile at Rashid, in the northern part of the country.
- The bridge comprises three spans of 90 m length and 2 side spans of 55 m. Construction started in 1998 and ended in January 2000.
- The bridge was founded on six 1.2 m diameter piles that extend as columns to carry the post-tensioned deck girders.
- The approaches are 175 m in length on each side, with reinforced concrete girders spanning 25 m. The width of the bridge is 18 m.

PROJECT REQUIREMENTS

- Upgrading of Rashid bridge post-tensioned beams to bear excessive loads of trucks, the heavy traffic passing through it from the newly constructed ports such as Damietta Port, the request of the Key owner (GARBLT) for an upgrading and strengthening system with minimum application duration to avoid the conflicts of closing the bridge and changing the routes and traffic flow .





Why Sika:

- Sika's-huge references
- Sika technical supports at the sites and during the project all different phase
- Sika complete system
- Sika's-strong supply chain



Sika Solution:

- Durability and complete compatible strengthening system including Glass fiber (SikaWrap®FX-75C) cord for the structural connection, used as a fiber connector for the anchorage of SikaWrap® fabrics , also the protection against environmental effect using Sikagard® -550 W Elastic system.
- Easy application unlike other strengthening systems steel systems are more complicated and the systems requires much more maintenance and protective measures, especially that the application is over the river Nile with span of 55m length which require light weight system, easy handling and application, min. numbers of workers.
- Strengthening system with light weight to avoid extra loads for the bridges main elements (columns , foundation), as strengthening under water will be extremely difficult as the bridge is crossing the river Nile .



RASHID BRIDGE



PRODUCTS DELIVERED:

- Sika Carbodur® S1012 9000m
- SikaWrap®-300 400m²
- SikaWrap®-430G 100m²
- SikaWrap®-FX-75C 150m
- Sikadur®-330 680kg
- Sikadur®-41CF 20ton
- Sikadur® -30LP 8280kg
- Sikagard®-550 W Elastic 1ton

PROJECT PARTICIPANTS:

Main Contractor: General Nile Co. For Roads & Bridges

Specialized CFRP Applicator : Elghaly for modern construction

Specialized CFRP Consultancy office : Dr Ibrahim Mahfouz

Construction supervision of the project Renovation: ACE Moharram.Bakhoum consultancy Office

key owner : Garblt(General Authority For Roads, Bridges & Land Transport)

For More Projects Information



http://egy.sika.com/en/group/Publications/Sika_At_Work.html

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