JOB RECORD
N° 11

UP-KEEPING OF STEEL BRIDGES IN TRIPOLI AND BENGHAZI (LIBYA)

After extensive investigations, the Libyan General Committee for Housing and Utilities issued detailed and strict specifications for the maintenance of steel bridges and fly-overs, including anti-corrosive protection of the structures in general, the remake of the thick wear layer, replacement of the rubber expansion joints and minor mechanical repairs.
Since some of our products are in full compliance with the specifications, we took part to an international tender indicted by the Tripoli Municipality for the **Steel Bridge** on Airport Road.
Our offer for the anti-corrosive protection of some 40.000 sq.m. of steel carpentry, the removal of the old wear layer and its complete remake for about 7.000 sq.m. and all ancillary intervention was fully accepted and the contract was awarded to SINIT Libyan Branch.
Tender procedures and order formalities took a long time to be completed but, when the L/C was finally established on 30.06.99, the Municipality demanded that the whole work be completed by end of August '99, because of some celebrations which had to take place on September 1st .
Although the offer had been based on a 9-month duration, SINIT accepted the mere 90 days time limit, inclusive of production of materials, shipment of equipment, mobilization and application work.
By using its facilities at the best, choosing all possible alternate routes for shipping and renting some equipment on site, pending arrival of its own machinery, SINIT started the actual work during the second week of July 1999, as requested by the Client.
By putting in a larger number of technicians, workers and extra equipment, the **Steel Bridge** was ready for delivery on August 31 1999, in time for the planned celebration.

Main material used for this job were:

- 1.200 Tonnes of Grit (Foundry Slag)
- 4.536 Kg. of ZNP (Epoxy Primer)
- 35.000 Kg. of TEP (Tar Epoxy Polyurethane as wear binder)
- 43.000 Kg. of Durop (Hard non-skid wear material)
- 24.300 Kg. of S Primer, # 100 Coat, PU Coat (Anti-Corrosive Coatings)
- 5.100 lm. of Joint 3L (Rubber Expansion Joints)

On the basis of the excellent results obtained with the maintenance work on the **Airport Road Steel Bridge** in Tripoli, the Benghazi Municipality has extended the works to the **Airport Road and Tripoli Road Bridges** in Benghazi.
Since most problems, both technical and commercial, had been already overcome for the Tripoli Steel Bridge, the whole supply procedure has been dealt with in a very short time, although there was no special requirement for an early completion.
Also the application time has been substantially reduced thanks to the equipment made available for the Tripoli Steel Bridge, well in excess of the strictly necessary one.
SINIT was authorized to start the work on the first bridge on 10.04.2000, the structure was completed and taken over on 26 August 2000.
Maintenance on the second bridge started on 25 August and has been completed within the end of 2000.
The whole maintenance works, covering some 60.000 sq.m.of steel structures and some 12.000 of wear surface in Benghazi area, required:

- 2.500 Tonnes of Grit (Foundry slag)
- 7.000 Kg. ZNP (Epoxy Primer)
- 56.500 Kg. of TEP (Tar Epoxy Polyurethane as wear binder)
- 86.000 Kg.of Durop (Hard non-skid wear material)
- 39.600 Kg. of S Primer, # 100 Coat, PU Coat (Anti-Corrosive Coatings)
- 8.300 lm. of Joint 3L (Rubber Expansion Joints)

View of roadways as found

Typical steel structure as found

Roadways during surface preparation

Roadway with priming coats

Laying the wear coat

Laying the wear coat

Bridge structure at handing over

Roadway open to traffic in Tripoli airport road

Roadway open to traffic in Benghazi, Tripoli road

Roadway open to traffic in Benghazi airport road

SINIT S.r.l. – Via V. Chiarugi, 76 – P.O. BOX 107 – 45100 ROVIGO (Italy)
Ph. ++ 39 0425 361961 (r.a.) – Fax ++ 39 0425 410115 – Email: info@sinitworks.com - sinit@tin.it
www.sinitworks.com