



## ROAD BRIDGES SRI LANKA



Launching over main span



Launching operation

Sri Lanka - the former Ceylon - world's most famous country for tea plantation has accorded high priority for the improvement and maintenance of economic infrastructure, in particular the road sector. The construction of Hirana Bridge, Molkawa Bridge, Weralugastotupola Bridge and two bridges at Lathpandura in Kalutara District (Western Province) have been identified as top priority projects.

MCE has been awarded with the turnkey construction of above mentioned five bridges with spans from 25m to 70m. Structures are designed as single and multi-span bridges, for 2 lanes and footpaths on both sides. The statical concept selected consists of concrete substructures (piers and abutments) and a truss girder composite deck.

During the project's first phase site investigations, topographical surveys as the bases for the conceptual and detailed technical design have been executed. Subsequent construction works commenced with site clearance and installation of local detours.

Meeting the local maximum soil pressures, foundations are designed as 1,20m diameter bored piles to a depth of maximum

30m from ground level. Further on pile caps, piers, wing walls and bearing walls are constructed of concrete. Meanwhile works are ongoing at substructures, steel members have been manufactured, galvanized and delivered to site. In adjacent to each bridge location preassembly yards for steel erection works have been installed where single members are bolted to complete girders. Structures have been launched by rollers over temporary foundations, abutment as well as permanent and temporary piers. Temporary balancing, lifting and support have been provided by usage of mobile cranes, barges and balance tanks. Trapezoidal sheets bolted to transversal beams have been used as permanent shuttering for concreting the carriage way slab. Finally bridge equipment as handrails, guard rails, dewatering as well as road connections and wearing course have been installed.

Bridges have been opened for public traffic by the Sri Lankan Minister of Transport. Now the old and low capacity ferries have been replaced by 5 bridges designed for a life cycle of 100 years.

#### Facts & Figures:

Steel weight:	750 t	Construction:	Truss girder bridges galvanized with orthotropic decks
Lengths:	25 up to 125 m	Customer:	Road Development Authority
Width:	10.50 m	Construction period:	2006- 2009
Steel quality:	S 235JR+M, S 355J2+M, S 460 M		

MCE GmbH  
 4031 Linz, Lunzerstrasse 64, Austria  
 Phone: +43 732 9011-77126 • Fax: +43 732 6980-8162  
 office@mce-hg.com • www.mce-hg.com

