

# Batang Mukah Steel Arch Bridge, Malaysia

**Client:** Torsco Berhad

**Main Contractor:** Hock Seng Lee Berhad



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CIVIL 48

The four lane Batang Mukah Steel Arch Bridge with a length of 170 metres was constructed to join the towns Mukah and Sibul together. The previous mode of transport between these two towns was by ferry.

Torsco Berhad engaged Fagioli PSC to perform the lifting works associated with the installation of the arch structure. The steel arch comprising of two side sections and one centre section were fabricated in the Torsco Berhad workshop and delivered to site one at a time using a barge. Each of the side sections was lifted by 2 x L300 and 2 x L180 and the horizontal forces were counterbalanced by an identical jacking arrangement. Lifting of centre section was carried out by 4 x L50 jacks.

**Below:** Jacks in tension frames connected to a pinned pendulum. Horizontal forces to the top of the towers being strictly controlled and balanced.



**Above:** Lifting completed for the two side sections. The lifting and tie back jacks continue to support the side sections. The lifting jacks for the centre section can just be seen on the ends of the side sections.

**Below:** Start of the lifting operations for the first side section.

