Case Study 9: Bridge Work

Spences Bridge - BC Canada

Contractor: Buckland & Taylor, Ltd. – Bridge Engineering

Project Scope:
Provide access for inspection of the entire underside of the 700 ft (213.4 m) bridge including all trusses both longitudinally and across the span. In addition, each pier of the bridge was inspected down to the water level.

Challenges:
- Working over fast flowing river
- Working over and near an active railway
- Extreme weather conditions including high winds, rain, and cold
- No permanent power or lighting supply on bridge
- Severely sloping, rocky terrain on both ends of the bridge making stage building difficult.
- Small time frame to get the project completed. The well-traveled bridge was closed by Canada’s Ministry of Transportation for this inspection project, so time was of the essence.

Solution:
With the expertise of four Spider riggers, two 30 ft (9.1 m) modular swing stages powered by 1,000 lb (453.6 kg) hoists were moved across the entire 700 ft (213.4 m) span of the bridge, enabling two on-site engineers to inspect the underside of the bridge and piers. Two rolling Outrigger Beam Support Frame towers were engineered to support both stages simultaneously, and on-site generators powered the stages through the absence of a readily-available power supply.

The project was completed in just 10 days, 4 days ahead of schedule, resulting in a 30% labor reduction and significant onsite savings to the contractor.

Check out the products featured in this case study:
- Modular Platforms - pages 70-71
- Outrigger Beam Support Frame - page 102