



Erection of Catwalk Rope and Main Cable of Jeokgeum Bridge

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Summary

Jeokgeum Bridge is one of the ongoing suspension bridge projects as a follow-up of Yi Sun-sin Bridge. Jeokgeum Bridge had adopted the same construction method for its main cable as the Yi Sun-sin Bridge, and the most of the equipment and the acquired techniques were applied again to Jeokgeum Bridge. Therefore, the most of the cable erection procedures were similar to Yi Sun-sin Bridge, however, there were several unique features and two of them are introduced in this paper: (1) the catwalk rope erection using the simplified suspender system and (2) the spread control by adjusting tension of spun wires.

Keywords: suspension bridge; main cable; catwalk erection; suspender; spread control

1. Introduction

Jeokgeum Bridge, located on the southern coast of Korea, is a single span suspension bridge with the 850m long main span. The installation of the temporary structure for the main cable started in June, 2012 and the main cable erection was finished in March, 2013.



Fig. 1: The overall view of Jeokgeum Bridge after the completion of the cable erection