



Behaviour of Webs of Box-Girder Span during Launching

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Summary

Observation data of web deformations of the box-section continuous span of River Kama Bridge in Perm, Russia, when in use of longitudinal launching are presented. The purpose of this work is analysis of influence the span assemblage technology on changing of primordial web cambers depending on web thickness.

Keywords: camber; amplitude; web thickness; launching; box-girder; observation.

1. Introduction

For engineering supervision of the River Kama Bridge construction, when assembling and launching of the superstructure, there were collected the data on the initial camber of the vertical webs of the box-girder span and on camber change during launching.

The scheme of continuous box-section span is (94+3x126+147+2x126+94) m. The cross-section is shown in *Fig. 1*. The height of the box is 3632 mm. Width of a web panel (the distance between transverse beams or vertical ribs) is 1500 mm. The thicknesses of webs are 12, 14, 16 and 20 mm.

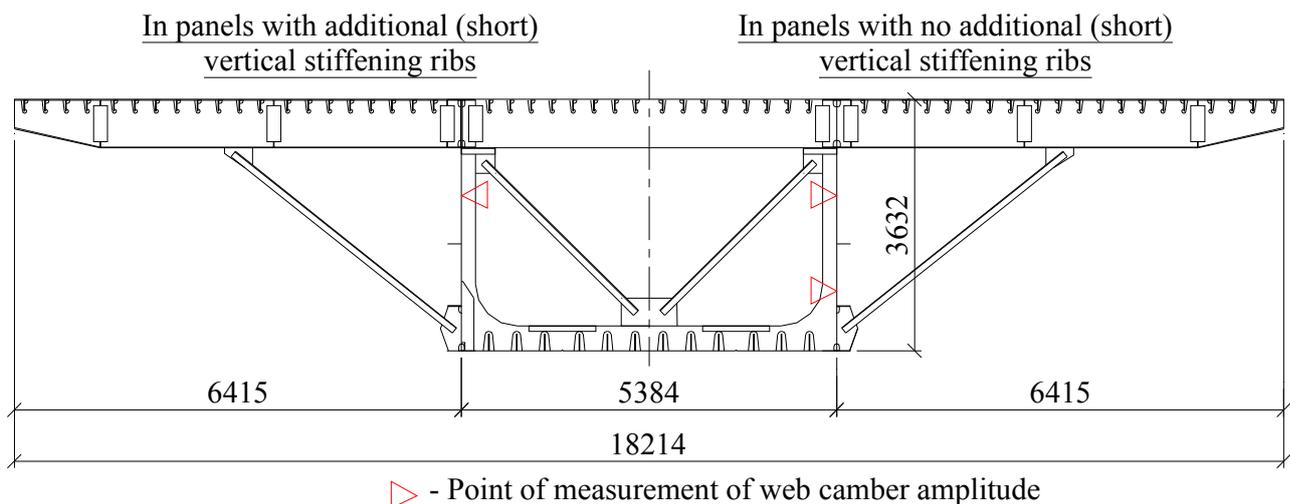


Fig. 1: Cross-section of the superstructure and points of the camber amplitudes measurements

The superstructure was assembled by the method of longitudinal launching launching from the two banks simultaneously. The left-bank part of the superstructure (left-bank joint) was 546,2m long and the right-bank part of the superstructure (right-bank joint) was 420,2m long. The superstructure was closed in the middle of the span 147m long.