



New UHPFRC Bridges in Czech Republic

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Abstract

This paper deals with new UHPFRC (Ultra High Performance Fibre Reinforced Concrete) bridges produced or constructed in 2018 in Czech Republic. The paper includes a short description of 3 unique pedestrian bridges with load bearing structure made of UHPFRC and 2 steel bridges over the railway track with lost formwork for bridge decks and cornices made of thin UHPFRC slabs.

Focus is given on the testing of the material, comparison of test specimens and summary of results from UHPFRC production in real size volume of cubic meters. The size effect of control specimen and the results analysis is given in the last chapter.

The 3 mentioned unique pedestrian bridges are Footbridge over the Lubina river in city Příbor, Pedestrian and cycle bridge in the vicinity of Black Bridges in city Tábor and Footbridge over Dřetovice stream in Vrapice - city part of Kladno. All new UHPFRC structures should be worthy of attention of bridge experts and community of specialists in the field of concrete engineering.