THE ITALIAN EXPERIENCE: TWO CASE STUDIES

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ABSTRACT

The construction of first Italian HS Railways, linking Rome to Florence, was completed at the end of the eighty when the bridge crossing the Arno river was opened to the trains running at 250 km/h.

This p.c. bridge has a 230 m continuous deck rigidly connected to the piers, an expansion length of 115 m so resulting for the thermal effects.

In spite of the absence of joints in the ballasted track, its behaviour in about 20 years of service has been excellent.

The cable stayed bridge over the PO river is the second example illustrated in the paper. It has been completed in 2006 and will be operated at the speed of 300 km/h.

The 192 m main span and the two 104 m side spans made special joints in the rails necessary at both the ends of the bridge: it will be only exception on the whole Italian HS Railway network.