Don Bosco Bridge at Arenaccia: Structure, Art and Architecture

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Summary

In this paper, the realisation of a reinforced concrete variable-thickness skew vault bridge recently awarded a special mention at AICAP 2009 Prize is illustrated. In the paper special attention is focussed on the material used (self-compacting concrete with special mix design to allow casting onto doubly inclined surfaces), on the concrete protection issues leading to choose a full surface protection with the use of mosaics and, finally, to the aspects related to the correct architectural design which involved the proper insertion of the bridge in the surrounding urban environment. In this activity special attention was paid to the aesthetic value of the construction in its entirety.

Keywords: Bridge, Arch, Self Compacting Concrete, Architecture, Art, Integration

Fig. 1: The Don Bosco bridge at Arenaccia

1   Introduction

The Don Bosco Bridge at Arenaccia is a reinforced concrete variable thikness skew vault which has been realized in the historycal center of the city of Naples. The bridge, was completed on 21 February 2009 and was awarded a special mention at the AICAP Prize 2009 for best concrete construction within the category of bridges with the following motivation: