

“La Belle Liégeoise”, the new footbridge in Liège

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Abstract

The newest footbridge in Liège, known as "La Belle Liégeoise", was opened on 2nd May 2016. Located upstream of the landscape window created by Guillemins esplanade, this bridge provides a connection for soft transport modes from the railway station across the Meuse to La Boverie park, maintaining clearance for navigation.

The main span over the Meuse is 163 metres for a total length of 294 metres. The 5.5 metre wide decking is positioned laterally to the supporting structure.

Bureau Greisch, in association with the landscape architect Corajoud, was responsible for the complete design mission for the bridge.

The aim of this article is to detail the whole process of the conception of the bridge, from first sketches to erection control.

Keywords: Footbridge, Slender, Dissymmetry, Welded, dynamic

1 Introduction

The new footbridge known as “La Belle Liégeoise” was opened on 2nd May 2016. It provides a path for cyclists and pedestrians between Guillemins railway station (Liege – Belgium) and La Boverie park across the Meuse, maintaining an 8 metre clearance for navigation.

The 294 metre long superstructure of the bridge is made of steel. The supporting structure for the main span over the Meuse (163 m * 7 m) is a suspended construction, positioned on the side of the deck, thus completely freeing up the view towards the Guillemins esplanade.

The desire to design a thin and elegant structure integrated into the site, combined with the need

to avoid as much as possible any restriction of the navigation on the Meuse, led to the obvious use of steel for the main structure.

The construction needed 740 tonnes of steel. Structural elements 15 metres long were trucked onto a temporary assembly site. These elements were assembled on the ground in six sections, the largest weighing 400 tonnes for a 150 metre length. These six sections were finally transported by barge, lifted and positioned by three floating cranes. The most impressive section, consisting of the suspended part, was transported horizontally before being re-erected on site.