Pedestrian and cycling bridge

Sölvesborg, Sweden

When designing a pedestrian and cycling bridge between the centre and a newly developed residential district, the town of Sölvesborg in the south of Sweden looked for a material that would last with no or minimal maintenance. Duplex stainless steel was the answer. As the salinity of the nearby Baltic Sea is lower than that of, for instance, the North Sea, lean duplex stainless steel was fully adequate and turned out to be an advantageous solution both technically and economically. Any re-painting at a later point in time is made redundant, which is tantamount to a saving of €500,000 per maintenance event (at 2012 price levels). The nearby bird conservation area will also benefit because the noise and pollution associated with the sand blasting of conventional steel structures will be avoided. At 756 m in length, this is currently the longest pedestrian bridge in Sweden. The extra weight saving which is made possibly by the high-strength properties of duplex stainless steel was an additional advantage in the design of the attractive and uniquely shaped arch.

Details

Environment: Coastal
Bridge designer: Ronny Södergren, Sölvesborg, Sweden
Owner/developer: Municipality of Sölvesborg
Fabricator: Stål & Rörmontage, Sölvesborg, Sweden
Stainless steel grade: LDX 2101 (EN 1.4162)
Product type: Plate
Dimension: 5 mm - 30 mm
Surface finish: 1D
Total quantity: 150 t
Producer or supplier: Outokumpu
More information: outokumpu.com