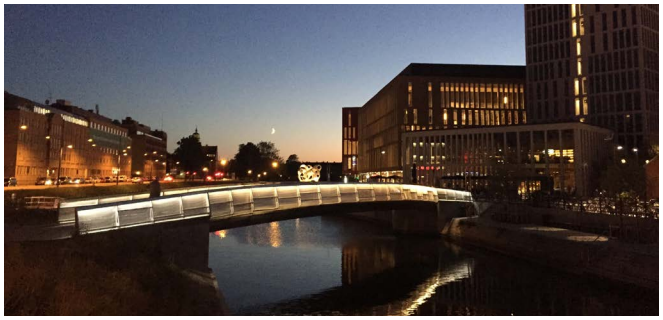
Pre-assembled pedestrian bridge

Malmö, Sweden

Malmö's redeveloped former harbour district is a model of the Swedish approach to modern urban architecture at a human scale: a mixture of high-rise and low-rise residential buildings, hotels and an event location; easy access for pedestrians and cyclists, combined with the highest standards of energy efficiency. As part of this architectural concept, a pedestrian bridge 40 metres in length and 6.5 m in width was designed.
The curved structure was completely pre-fabricated in Poland and transported in one piece to Sweden by sea and road in a spectacular action (youtube.com). The mixed-material design involves duplex stainless steel specifically for the cantilevers and parts of the railing. Austenitic stainless steel was specified for the visible parts of the railings and the reflective perforated cladding which is lit from within at night.
The stainless steel components are fastened mechanically to the carbon steel sections to avoid the complexity of welding dissimilar metals. Galvanic interaction is prevented by the coating of the carbon steel sections, which serves as an insulator.



The bridge was fully pre-fabricated and transported to the site in one piece.
Photos: Vistal Gdynia S.A., Gdynia, Poland

Details

Environment:	Coastal
Fabricator:	Vistal Gdynia S.A.,Vistal Eko sp. z o.o., Vistal Construction sp. z o.o.
Stainless steel grade:	316L (EN 1.4404), 2205 (EN 1.4462)
Product type:	Plate, perforated sheet, circular hollow sections
Stainless steel product, finish and dimensions	316L (EN 1.4404) perforated sheet, 1.5 mm; hot rolled sheet 6 mm and 10 mm 2205 (EN 1.4462) plate, 15 mm and 20 mm 316L (EN 1.4404) circular hollow sections, 48.3 mm x 2.0 mm
Surface finish:	2B, 1DC
Total quantity:	12 t of stainless (out of 45 t in total)
Producer or supplier:	Industeel, Outokumpu, Acroni
More information:	vistal.pl

Click here for more stainless steel in infrastructure