

Motorway flyover

Kerensheide, The Netherlands

In 2012, work began on an overpass to improve traffic flow in a busy highway interchange in the south of the Netherlands. Being close to the border and spanning a main entrance route from neighbouring Belgium, the structure should be representative and welcome motorists to the country.

The location was adjacent to one of the Netherlands' biggest clusters of the chemical industry. In winter, sub-zero temperatures are common and de-icing salt is regularly applied to the roads. The designers took the resulting corrosion risks into account by three measures. Firstly, an appropriate grade was selected. Secondly, the polishing direction was vertical to

ensure that rainwater flows off easily and rapidly, washing away potential contaminants that may adhere to the surface. Thirdly, a geometry was designed which involved a rounded upper part to avoid stagnation, an inclined outer surface to maximize exposure to rain and a lower part only slightly slanted inwards, which ensured that the run-off water would flow along the recessed areas and only drip off at the lower edge, carrying away with it most of the pollutants.

In total, more than 4,000 panels were mounted to form 1,200 m of bridge-edging. For damage-less transportation custom-made pallet boxes with foam padding were developed. On site, specially designed mounting cars were used to take the panels to their final position. They made it possible to install the panels without disturbing the traffic underneath so motorway closures were made redundant.



Details

Environment:	Industrial
Owner/developer:	Rijkswaterstaat (Dutch department of civil works)
Fabricator:	Jos van den Bersselaar constructie b.v., Udenhout, The Netherlands
Stainless steel grade:	316L (EN 1.4404)
Product type:	Sheet
Surface finish:	Matt polished (2K)
More information:	bersselaar.com