

Road bridge refurbishment

Nou, Itoigawa, Niigata Prefecture, Japan

The concrete road bridge of a coastal road in the West of Japan had developed severe corrosion in its formwork. Besides the chloride-bearing marine atmosphere, the use of de-icing salts in winter was another cause of the damage. For the refurbishment of the bridge, the selective

use of ferritic stainless steel was a rational and cost-saving choice. Out of the four spans of the bridge structure, the exposed outer two needed to be replaced. The new concrete spans were cast on site and reinforced with type SUS410 17% chromium stainless steel, which ideally fulfilled both the corrosion resistance and cost reduction requirements. While the use of stainless steel reinforcement in new roads and bridges is not uncommon, this case shows that the stainless steel option is also technically and economically viable in repair and renovation.



Details

Environment:	Marine
Stainless steel grade:	SUS410
Product type:	Reinforcement bar
Total quantity:	60 t
More information:	jssa.gr.jp

