**Tension rods in a footbridge**

**New Delhi, India**

A footbridge spanning a major sixteen-lane road involves tension rods in 22% Cr 5% Ni duplex stainless steel. Urban pollution resulting from road traffic makes corrosion resistance an important criterion of choice. Tension rods require particular attention: in the threaded end parts, zinc layers become difficult to apply with a reproducible and consistent thickness. Additional damage during the installation process, which would make the threads susceptible to corrosion, cannot be excluded. In a busy urban environment, conventional steel would have required a dual metallic and organic protective layer to meet the durability requirements on bridges.

The designers decided to use stainless steel tension rods for the structure that is otherwise made from hot dip galvanized and painted structural steel. The visual qualities of the stainless steel were an additional advantage because the footbridge is part of a major access route to a stadium and is regularly used by thousands of visitors.