

Walkway suspension in an Underground station

Bilbao, Spain

In the recent Underground stations across the capital of the Spanish Basque region, stainless steel grade 316 is a common feature for stairwells and claddings, where their aesthetic qualities and proven low-maintenance properties are an asset. There is, however, one additional feature that makes some of them quite special: the landings

seem to hover above the platforms and rails. Filigree stainless steel suspension bars make this elegant construction possible.

As the stairs and elevated access paths are part of the escape route, they have to meet high fire resistance requirements. Stainless steel 310S (EN 1.4845) is a 24-26 % Cr, 19-22 % Ni austenitic grade that is otherwise used for its heat resistance in industrial high-temperature applications. The structural engineers used their mechanical and physical properties to translate the architect's daring concept into a technical solution.

Details

Environment:	Urban
Architects:	Norman Foster
Structural engineers:	Ingenería Metro de Bilbao, S.A. (IMEBISA)
Owner/developer:	Bilbao Council
Fabricator:	Gramometal, Ortuella, Spain
Stainless steel grade:	316 (EN 1.4401) and 310S (EN 1.4845)
Product type:	Sheet, bar
Surface finish:	2B
Total quantity:	50t of grade 310S and 70 t of grade 316 per station
Producer or supplier:	Acerinox
More information:	cedinox.es

