Cladding of a refurbished tunnel

Valtournenche, Italy

The refurbishment of a 283 meter-long road tunnel in the mountainous area of the Aosta Valley involved the installation of a new cladding. As a material, colour-coated stainless steel was specified. The stainless steel substrate served to ensure long-term corrosion resistance, especially in view of the inevitable exposure of the rear side of the sheet to humidity. On the front side, reflective metallic surfaces had to be avoided to prevent glare. In-line colour coated stainless steel fulfilled both these critical requirements. The proven ferritic 17% chromium grade 430 (EN 1.4016) was a cost-effective solution. The selected colour, white, spread the light evenly without causing glare. The chemical composition of both the primer and the coating ensured that no toxic gases could develop even in the case of fire. Installation was fast and efficient, making it possible to complete the refurbishment within two months.

Details

Environment: Rural
Fabricator: S.P.A.I., Timoline di Cortefranca, BS, Italy
Stainless steel grade: 430 (EN 1.4016)
Product type: Coil-coated sheet
Dimension: 1 mm
Surface finish: Coil-coated sheet; polyester-based organic double-layer coating, 20-25 µm thick
Total quantity: c. 35 t
Producer or supplier: Acciai Speciali Terni
More information: centroinox.it