Mont Blanc Tunnel Cladding Anchors

Why stainless?
Fire resistance.

Fabrication process:
Anchors are created by making a skin pass on a wire rod, straightening, cutting to length and cold threading.

Grade:
EN: 1.4404 (AISI: 316L).

Manufacturer:
G&B Fissaggi, Italy (gebfissaggi.com)

The Mont Blanc tunnel between Italy and France was the scene of a terrible fire in March 1999 which claimed many lives. The tunnel re-opened following three years of extensive work to repair the damage caused by the blaze.

Safety precautions in the tunnel are now extremely tight. Particular attention is paid to the fire resistance of all components in the tunnel.

The Italian National Roads Authority has published a circular which contains directives for the construction of tunnels. Stainless steel, thanks to its characteristic stability and resistance to high temperatures, is cited as the material of choice for the fabrication tunnel components such as smoke extraction fans and lighting systems.

The system used to anchor the fibre cement cladding panels that line the Mont Blanc tunnel is now composed of 16 mm stainless anchors. The anchors have been tested to ensure they maintain their support function for at least two hours at 1,000° C.

Images courtesy of Centro Inox, Italy