

Cable Anchoring Heads

Why stainless?

- Fire resistance
- Good mechanical properties.

Fabrication process:

Bent and threaded stainless steel bar.

Grade:

EN: 1.4301 (AISI: 304).

Manufacturer:

Cogne Acciai Speciali, Italy (cogne.com).



In April 2002, a light aircraft hit the Pirelli skyscraper in Milan, Italy. At least five people were killed in the accident and more than 30 injured.

The top floors of the 30-storey building caught fire. In particular, serious damage was caused to the 26th and 27th floors. The planking of the 26th floor took on a concave shape, bending more than 25 cm, while the floor of the upper story took on a slightly convex shape.

Restoration of the structure involved inserting a group of post-stretched cables. The anchoring of the heads of the active-reinforcement cables (or noses) against the core of the beam in reinforced concrete was done by means of 28 mm threaded stainless steel bars with a yield stress of > 800 MPa.

Above: The Pirelli Building after restoration.
Below: Details of the anchoring heads.

Images courtesy of Centro Inox, Italy.

