

The Centro Botín



The Centro Botín, is a private art facility and a place for develop the creativity. It is located in Santander bay. The building design, piece of the Italian architect Renzo Piano, is based on two main pillars: the light and the connection to the city. For this purpose, the construction is conceived as a cantilever, not touching the ground, permeable to the passage of light and sea sight. The interaction with the city is achieved by generating two volumes. Those volumes are created to be connected, allowing free movement of people and meeting. The bigger volume is dedicated to art and

it owns a large exhibition hall. The second volume is focused on teaching, and the joint of both is carried out by gateways and stairs.

Stairs enables the interrelation of spaces, playing a key role. They are made by unequal legs angles joined together to create a framework for the step. The selected material happened to be AISI 316L stainless steel in 1D finish laser welded. Prescription of the proper material is essential to resist environmental conditions. AISI 316L stainless steel is recommended for marine environment due to its good corrosion resistance under presence of chlorides.

5 types of unequal legs angles and 5 types of T unequal legs profiles with a unique thickness of 5 mm are developed to construct the stairs. These profiles are produced by laser-welding strips, which are cut from hot rolled, annealed and pickled plate. After welding and straightening process, the final product is sand blasted, passivated and free from scale, having as a result an extraordinary clean and homogeneous surface.

The company in charge of the manufacturing of these profiles was **Montanstahl AG**, which provided 7500 kg of stainless steel structural profiles. This Swiss company is placed between worldwide leaders in stainless steel and carbon steel standard and customized profiles market, due to its wide range of [production technologies](https://www.montanstahl.com/processing/production-technologies/). [<https://www.montanstahl.com/processing/production-technologies/>] Laser welding, 3D laser, hot rolling and hot extrusion, cold rolling and cold extrusion, are some of the options they offer to their clients in order to find the most suitable solution for their project needs.