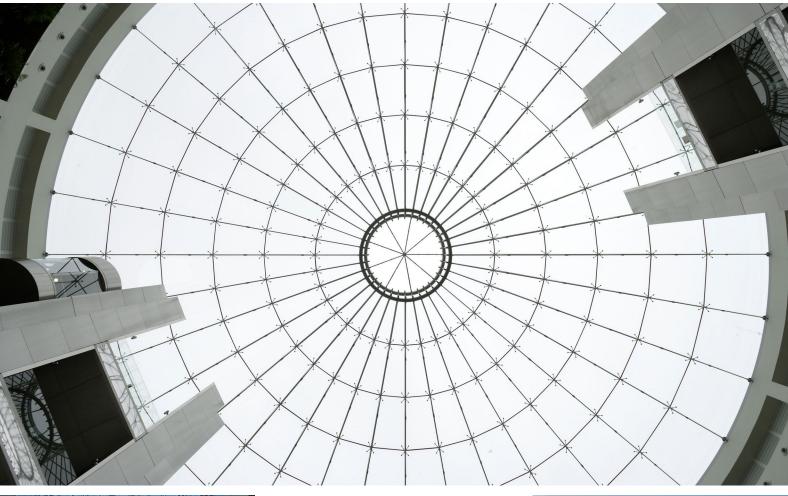
BANCOPOLIS

Architect Client

CEZOSA SANTANDER BANK SPAIN, MADRID









The stainless steel tensile structure determines the overall image of this extraordinary and highly transparent circular glass roof, 31 meters in diameter and with a structural height of 3 meters. The layout is clear as a bicycle wheel: an outer ring that is permanently pre-stressed and an inner ring that is subject to tension and functions as a hub. In between 36 compression and tensile rods are tensioned, without stabilizers for wind., without stabilizers for wind. To obtain stiffness the upper and lower tension bars of trusses are pre-stresshed.

The curvature and design of the roof is a direct result of the optimal shape of the trusses and the distribution of forces in the structure. The roof is covered with structural and frameless glazing of which the stainless steel glass nodes are specially designed for this project. A 3,5 meters wide glass dome forms the crown of the roof. This glass dome includes 9 tempered hotbent glass panels. The project has opened the eyes of the client for lightweight tender steel structures.