

Hassan II Mosque, Casablanca

Cost effective corrosion control

The Hassan II Mosque in Casablanca is partially built over the ocean and is consequently faced with corrosion phenomena. In order to address this situation, Cetim proposed an optimal test program comprising requisite and relevant analyses.



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OUR CUSTOMER

Corporate name

Foundation Hassan II Mosque, Casablanca

Activity

In 1986, the late King Hassan II ordered the construction of the Hassan II Mosque in Casablanca. It is one of the largest mosques in the world and was designed by French architect, Michel Pinseau. Its minaret is 200 m tall and the 20,000 m² prayer room can accommodate 25,000 worshippers.

We would be willing to do anything for some monuments! However, incurring high analysis and expert investigation expenses is not a sign of good management or a guarantee of good restoration. The foundation responsible for administering and managing the Hassan II Mosque, set on the ocean front in a very aggressive marine environment in Casablanca (Morocco), clearly wanted the best for its place of worship by preserving its glory and reputation. This was imperative, as after twenty-five years, the salty sea air had corroded a number of metallic parts supporting the travertine covering the façade.

In an effort to address this damage, the leadership of the Hassan II Mosque Foundation launched a comprehensive call for tenders with a request for thorough and naturally costly examinations in order to find an efficient and lasting technological solution.

Cetim Maroc, which has been established in Casablanca since 2006, replied to the call by submitting a more cost effective proposal comprising just the requisite and appropriate examinations for understanding the premature corrosion phenomena affecting the travertine supports.

Increasing the life of the parts

The Foundation's leaders were won over by this specific and professional proposal and decided to entrust the experts of Cetim with these examinations. To ensure the success of their assignment, corrosion experts went on site to take samples and analyse the defective elements.

Micrographic and microscopic examinations of the structural samples, in addition to chemical analyses of the deteriorated accessories revealed extensive damage to a number of structural supports. In order to enhance the durability of the equipment, these experts recommended the use of

austenitic-ferritic stainless steel which should serve to increase the service life of these parts exposed to the salty sea air, as well as a regular inspection (every 5 years as from 30 years of service life) of the condition of the most sensitive accessories (threaded rods for anchoring in the concrete). An inspection of the parts delivered by the suppliers has also been recommended.

Cetim's asset

Cetim Maroc is able to respond to global calls for tenders from various Moroccan institutions and



organisations. Leveraging on the recognised quality of its materials analysis

experts and its technical resources, Cetim can address all types of failures affecting metallic parts.