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The Third Bosporus Bridge monitoring

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1 Abstract

Designing a world record span bridge is not the ultimate goal. Making it last and following it up so that it persists more than 100 years is the real challenge.

Thus, after having designed the Third Bosporus Bridge, the Designer participates in the follow-up of the structure by setting up an adequate monitoring.

Monitoring calibrating and interpreting is now the best way to ensure the sustainability of an exceptional structure. As everyone knows, the third Bosporus bridge is an hybrid structure, both suspended and stay cable bridge, a main span of 1408m and pylons of 323m. But what about monitoring?

- What is the monitoring to put in place? On pylons, deck, main cables, hangers or stays and supports?

- How to calibrate this monitoring to have a true zero point?

- How often and under what events do you save it and interpret it?

So many questions that an engineer today has to ask himself.

T-engineering wants to share both his point of view on this subject and his wonderful experience, mixing technical challenges and international context.

Keywords: Structural Health Monitoring, Sensors, Threshold Values, Long Span Bridge, Hybrid Bridge

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