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Spotlight on *Structures*



Editor's Featured Article

Associate Editor, Zhong Tao, has chosen a paper on structural steel design that provides an overview of EN 1993-1-14 and accompanying Technical Report as the Featured Article for Volume 92 of *Structures*.

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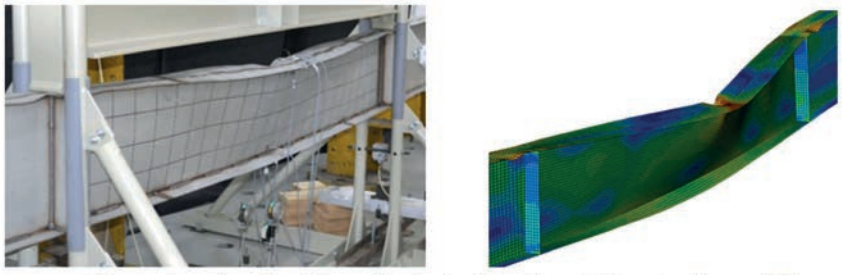
Structural steel design assisted by finite element analysis – An introduction to EN 1993-1-14 and TR 1993-1-141

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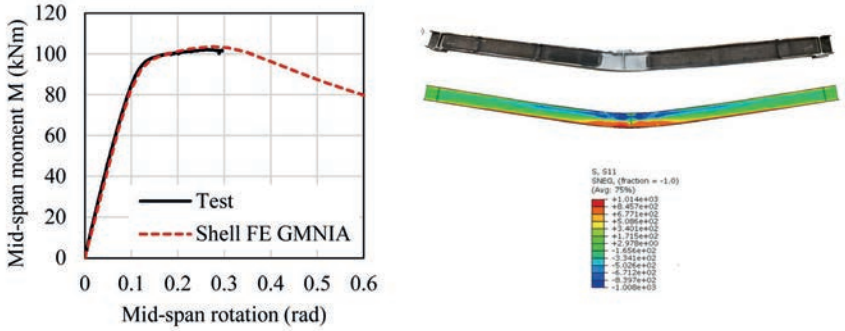
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The application of design by finite element analysis is becoming increasingly prevalent in engineering practice; however, codified provisions remain scarce. The vision of CEN/TC250/SC3 was to develop a new comprehensive document based on the existing provisions currently distributed throughout the different Eurocode 3 parts, and with extension where necessary to cover all fields of structural steel design. Within the development process, two documents were prepared: (i) the code, EN 1993-1-14 and (ii) a Technical Report, TR 1993-1-141. The new code provides rules on the use of finite element analysis and other numerical methods for verifying ultimate limit states, serviceability limit states and fatigue. In parallel, the Technical Report provides background information and explanations on all aspects of the code, as well as benchmark cases and design examples to support the correct application of the EN 1993-1-14 design rules and the necessary benchmarking required for model verification and validation. The assumed stakeholders are mainly designers who can find direct guidance for design by finite element analysis in daily engineering practice. The current paper gives an overview of the new code and accompanying Technical Report, as well as the development process and harmonisation within the current Eurocode 3 framework.

→| Read the full paper at **https://doi.org/10.1016/j.istruc.2026.112810**



a) Lateral-torsional buckling of a slender I-section stainless steel beam [26]



b) In-plane bending of high-strength steel welded I-section beam [27]

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