



SEMC 2019

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Special Session 18:

High-Strength Steel in Research, Construction and Application

<http://www.semc.uct.ac.za/semc/specialsessions/ss-18/>

Organisers:

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Summary:

Summary: High-strength steels are becoming increasingly important to the construction industry. In the meantime, weldable fine grain steels are available up to grade S1300. In addition to the strength properties, ductility, toughness and processability are also of importance in the application of these steels. For the design of members and joints, the design rules derived for normal strength steels have to be checked for their suitability for high strength steels and, if necessary, adjustments should be made. In particular, the lower plastic deformation capacity, and thermal influence on strength-increasing processes (such as thermo-mechanical rolling and tempering), must be taken into account. This concerns, for example, welding, flame cutting and thermal deformations in straightening work.

This special session of SEMC 2019 will bring together researchers, code writers and practitioners, to exchange knowledge and experience. In addition to material issues and the suitability of high-strength steels for various applications, other topics covered will include the design of components and connections, the calculation of welded and bolted joints, construction issues, and case studies on the successful use of high-strength steels in practice. Papers covering any of these topics are invited.

Important Dates for Authors:

Deadline for Submission of Abstracts	30 September 2018
Notification of Acceptance of Abstracts	15 November 2018
Deadline for Submission of Full Papers	01 March 2019
Notification of Acceptance of Full Papers	15 April 2019

