



# **steelChallenge-20**

Regional Championship



## **Audit Team Report**

# **1. steelChallenge-20 Audit Team Report**

The steelChallenge-20 audit team reviewed the log files and results from participants runs. This work includes re-creating runs to ensure they are consistent with the mathematical model programmed in the simulator.

During its work, they found situations of exploiting unexpected behaviours in the simulator and modification of the code. To ensure the high level of confidence and recognise the participants who play fair during the challenge, the Team applied the following rules as a reason for disqualification of the runs and participants.

- 4.3. Each competitor may only have a single login active at any given time and may only run the simulation in a single browser window at any given time. All runs that occur simultaneously will be disqualified.
- 8.0. Simulation results which exploit unexpected and/or unrealistic behaviours in the simulator code will be considered invalid. Any attempt to modify the simulator code will result in disqualification from steelChallenge-20.

## **1.1 Unrealistic energy balance**

We detected runs with an energy balance not in accordance with the mathematical model. These runs could not be replicated, which is against rule 8.0. The audit team used automated tools and manual techniques to validate this. The application of this criterion resulted in the disqualification of the runs.

## **1.2 Simultaneous runs**

As a standard procedure we evaluate the start and end time of every run of both simulators to identify those which started while another run was not finished. The Audit Team applied the rule 4.3.

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