

Transilvania University of Brasov
Materials Science and Engineering Faculty
Materials Engineering and Welding Department

Proposed topic for doctoral studies admission contest – September 2019

PhD field: Materials Engineering

PhD supervisor: Prof. dr. ing. Teodor Machedon Pisu

Topic: Research on improving the properties of welded joints in new materials used in the construction of overhead cranes

Recommended bibliography:

1. Americam Welding Society, AWS D14.1/D14.1M:2005 Specification for Welding of Industrial and Mill Cranes and Other Material Handling Equipment, 2005,
https://pubs.aws.org/Download_PDFS/D14.1-D14.1M-2005PV.pdf
2. Davis G.J., Guidelines for Inspecting Overhead Crane Structures, 2011,
<http://www.cranebuzz.com/planning/GuidelinesForInspectingOverheadCrane%20Structures.pdf>
3. American Welding Society, Structural Welding Code-Steel, ANSI/AWS D1.1:2010, Miami, Florida, 2010, https://pubs.aws.org/Download_PDFS/D1.1-D1.1M-2010-EN-PV.pdf
4. American Institute of Steel Construction, ANSI/AISC 360-16, Specification for Structural Steel Buildings, Chicago, 2016,
<https://www.aisc.org/globalassets/aisc/publications/standards/a360-16-spec-and-commentary.pdf>
5. ASME B30.2-2005, Overhead and Gantry Cranes (Top Running Bridge, Single or Multiple Girder, Top Running Trolley Hoist)
<https://law.resource.org/pub/us/cfr/ibr/002/asmе.b30.2.2005.pdf>
6. Pavlović G., Savković M., Zdravković N., Bulatović R, Marković G, Analysis and Optimization Design of Welded I-girder of the Single-beam Bridge Crane, Conference: IV International Conference "Mechanical Engineering in the 21st Century – MASING 2018"
https://www.researchgate.net/publication/324647290_Analysis_and_Optimization_Design_of_Welded_I-girder_of_the_Single-beam_Bridge_Crane