EXPERIMENTAL RESEARCH ON T-STUBS UNDER ELEVATED TEMPERATURES

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Abstract
Bolted end plate connections are widely used in multi-storey steel frame structures. Their design is based on the component method, which evaluates the behaviour of the basic components through equivalent T-stubs, to model the tension zone that constitutes the most relevant source of deformability. The paper presents the results of an experimental research on bolted T-stubs, tested under elevated temperatures, in normal and high strain rate loading conditions. The influence of the loading rate on the resistance and ductility of the T-stubs subjected to elevated temperatures is emphasized.

Keywords: bolted connections, T-stubs, elevated temperatures, strain rate

ACKNOWLEDGMENTS

This publication was supported by the European social fund within the framework of realizing the project „Support of inter-sectoral mobility and quality enhancement of research teams at Czech Technical University in Prague“ CZ.1.07/2.3.00/30.0034. Period of the project’s realization 1.12.2012 – 30.6.2015

Partial funding for this research was provided by the Executive Agency for Higher Education, Research, Development and Innovation Funding, Romania, under grant PCCA 55/2012 “Structural conception and COllapse control performance based DEsign of multistory structures under aCcidental actions” (2012-2016) and by the strategic grant POSDRU/159/1.5/S/137070 (2014) of the Ministry of National Education, Romania, co-financed by the European Social Funds – Investing in People, within the Sectorial Operational Programme Human Resources Development 2007-2013.