

# JOINTS WITH HIGH STRENGTH BOLTS CLASS 10.9 UNDER THE TRANSIENT LOADING - EXPERIMENTAL AND THEORETICAL ANALYSIS

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**Abstract:** This paper presents experimental and theoretical defining of the critical sliding force for the physical models connected with the high strength bolts M12, M16, M20, M24 and M27, class 10.9, under the transient loading. The sliding surfaces are unprotected and sand blasting treated. The transient critical sliding force and the friction coefficient are determined for two joint displacements of 150 micrometers and 300 micrometers. The experimental investigations are done in the Faculty of Mechanical Engineering in Mostar.

**Key words:** joints, sliding force, friction coefficient, experiment.



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