

## Failure Mechanism of Slip-Critical Connections on Curved Surface

**Authors :** Bae Doobyong, Yoo Jaejun, Park Ilgyu, Choi Seowon, Oh Chang Kook

**Abstract :** Variation of slip coefficient in slip-critical connections of curved plates. This paper presents the results of analytical investigations of slip coefficients in slip-critical bolted connections of curved plates. It may depend on the contact stress distribution at interface and the flexibility of spliced plate. Non-linear FEM analyses have been made to simulate the behavior of bolted connections of curved plates with various radiuses of curvature and thicknesses.

**Keywords :** slip coefficient, curved plates, slip-critical bolted connection, radius of curvature

**Conference Title :** ICCIUE 2016 : International Conference on Civil, Infrastructure and Urban Engineering

**Conference Location :** Kuala Lumpur, Malaysia

**Conference Dates :** February 11-12, 2016