1014-65-2 **Alexandros Antonioy Tasopoulos*** (alexandertasopoulos@yahoo.co.uk), Agios Dimitrios, Dimitras 17, 17343 Athens, Greece. *Numerial and Experimental results obtained from modeling and testing a double cover plate bolted splice connection.*

The purpose of this paper is to present the experimental and the numerical results using the model and test of a double cover plate bolted splice connection. For this kind of connection, it is important to have finite element modeling and stress analysis of the modeling specimen, also the experimental testing of the specimen provided. The Bending stresses between the cover plate and the main plate are the most important parts. Using the LUSAS-MYSTRO software, we modeled only one quarter of the specimen, because we symmetry both to horizontal (X) and vertical (Y). We also modeled in two dimensions because the third dimension is the thickness, whereas our specimen is different for the over side and the underside. The chosen elements type is plane stress, i.e. Parabolic, because for this model we will have better results. Also, we will have quite a fine mesh, which with the right type of elements is expected to give the best results. (Received March 11, 2005)