Abstract:

In this study, a three-dimensional finite element model is presented by using the ANSYS software to simulate the shear test with the " angle shear " connector.

The objective is the evaluation of the strength and ductility of the " angle shear " connector anchored in a reinforced concrete slab subjected to a static loading .The numerical model was verified by comparison with experimental tests taken from **the literature**. A parametric study is done to highlight the influence of the thready, changes in the strength of concrete $\mathbf{f_{ck}}$ and width of the connector ***L***.

The results show that the ≪ shear angle ≫ connector has a **rigid** behavior $(\boldsymbol{\delta_u < 2\ mm})$ and it can be used in the elastic design of bridges.

Key words : steel-concert, composite beams, shear connectors, push-out tests, Finite Element Method.