Simulation of crack under compression loads.

ABSTRACT

The paper presents the results of numerical simulation of crack of mild steel under compression load. The work is performed with the use of CASCA and FRANC2D/L for modeling and simulating the stress distribution of crack under compression radial load. The aims were to develop a finite element model and to simulate the crack propagation in steel plate under compression load. The simulation results were compared with experimental results for verification. The obtained results will provide a prediction of physical behaviour of the structure with failure direction of the crack path.

Keyword:  CASCA; Compression radial load; Crack; FEM; FRANC2D/L.