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# **D FINITE ELEMENT ANALYSIS OF THE EFFECT OF PORE SIZE AND FORM ON STRESS CONCENTRATION FACTOR IN SPOT WELDS**

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**Abstract :** The work presented in this paper utilises a numerical analysis for the computation of stress concentration factor generated by the presence in the weld nugget of a pore formed during the welding process. Welded structure containing porosity is subjected to uniaxial tensile stress. The effects of geometrical parameters of the pore and the interaction pore-defect on the stress concentration factor variation have been analysed

**Keywords :** Finite Element Method, Stress Concentration Factor, Defect, Porosity, Spot weld, steel