Strength Model for Shear Stud

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Abstract

The static strength of shear stud connectors in composite beams has been derived from push – out tests and empirical equation is suggested to predict shear strength of the connector. Suggested model is compared with previous models and codes in order to validate of the presented model. Load – slip curves are plotted for different values of compressive strengths of concrete. Experimental model was developed to predict the shear strength of the connectors as a function of compressive strength of concrete, shank stud diameters and slip. This comparison shows close agreement with other models.