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An experimental study of the capacity of top and seat T connections with stiffeners

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This study presents an experimental study on the behaviour of top and seat T connections with stiffeners. Eighteen full scale semi-rigid steel top and seat T connections were tested. Of particular interests are the models the resistance, stiffness, rotation capacity, ductility of a joint, and energy dissipation behaviour. The study also looks at the collapse modes of the connections. In addition, in this research, the effects of changes in the dimensions of the connection members on the connection behavior were examined for the T-connection type. This provided information about the optimum sizes of the connection elements. Also, in this study efficiently use residue IPE standard profiles, rather than send them back to the consumption cycle.

Biography

Abdulkadir Cüneyt Aydın is a Member of Ataturk University, Engineering Faculty, Civil Engineering Department, Structural Engineering Division. He worked in association with Karadeniz Technical University, Berlin Technical University, Gazi University and Polytechnica Delle Marche. He has published more than 36 papers in reputed journals and has been serving as an Editorial Board Member of HELİYON.

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