

A Review of the Axial Capacity of Circular High Strength Concrete-Filled Steel Tube Columns

Authors : Mustafa Gülen, Eylem Güzel, Soner Guler

Abstract : The concrete filled steel tube (CFST) columns are commonly used in construction applications such as high-rise buildings and bridges owing to its lots of remarkable benefits. The use of concrete filled steel tube columns provides large areas by reduction in cross-sectional area of columns. The main aim of this study is to examine the axial load capacities of circular high strength concrete filled steel tube columns according to Eurocode 4 (EC4) and Chinese Code (DL/T). The results showed that the predictions of EC4 and Chinese Code DL/T are unsafe for all specimens.

Keywords : concrete-filled steel tube column, axial load capacity, Chinese code, Australian Standard

Conference Title : ICSE 2016 : International Conference on Structural Engineering

Conference Location : Rome, Italy

Conference Dates : May 02-03, 2016