Evaluation Method of Bending Capacity and Ductility of Concrete Filled Steel Tube Members with Small Shear-span Ratio

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Concrete filled steel tube (CFT) members have been applied to the columns of rigid frame structures. However, failure mode, bending capacity and ductility of CFT members with small shear-span ratio are not clear because there have been few studies on them. In this study, we conducted cyclic loading tests of short-span CFT members with constant vertical load. As a result, we confirmed that they show bending failure mode, but the existing design method overestimates their bending capacity. Therefore, we have proposed a new evaluation method of their bending capacity and ductility.