Experimental Test for Compressive Yield Strength of Cold Form Steel C Profile from X and Y Product

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Abstract

Mild steel is one of the components that are often used by the community as a building structure. In this study try analyze how much the flexural strength of the mild steel C profile. This is done because the C Profile of mild steel is easy to work with, easy to obtain on the market and relatively inexpensive. Lightweight steel profile C can be used as a substitute for the roof truss of wood and concrete. The results obtained from the flexural strength of steel C profiles lightness of each test object. High strength mild steel C profile bending strength 7.5 cm, thickness 1 mm from PT. X with a span of 1 m and with one point compressive load produced deflection of 9.7 mm, P max 214 kg and σ lt (compressive yield strength) 23.61 kg / mm2 while from PT. Y produced deflection of 9.2 mm, Pmax 210 kg and σ lt (compressive yield strength) 21.82 kg / mm2. Thus the best results are generated from the PT. X compared to PT. Y.

Keywords: Experimental, C profile, flexural strength

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