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## DESIGN AND ANALYSIS OF STORAGE SHED FOR LPG BOTTLING PLANT

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**ABSTRACT:** Long Span, Column free structures are the most essential in any type of industrial structures and to fulfill this requirement along with reduced time and cost as compared to conventional RC structures. It involves in the storage of the bottling plant for loading and unloading of the cylinder. The present work involves the comparative study and design of steel structures. Design of the structure is being done in Staad Pro software and for the same reduction in the Z section purlin has been identified and experimental setup for the folded and welded connection, with stiffener and without stiffener and is then compared with in terms of weight which in turn reducing the cost. Here the welded section purlin with stiffener one is efficient and it withstand more load compared with folded purlin. In the present work, Conventional steel frames structure is designed for wind and seismic forces. Wind analysis has been done manually as per IS 875 (Part III) –2015.

**Keywords:** Conventional steel structures, Staad pro software section purlin test, with stiffener and without stiffener initial test, reduce the cost

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