## PREPARE BILLS OF QUANTITIES AND COSTING TO THE CONSTRUCTION OF THE STEEL STRUCTURE AND ROOFING OF A FACTORY IN KAPAR KLANG, SELANGOR

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## **ABSTRACT**

Structural steel has been widely used in construction industry. For instance, the construction of bridges, buildings and other types of structures are using structural steel as main materials. Various shapes, sizes and gauges can be formed out of structural steel. The I-beams, channels, and angles are some of the common shapes. Other forms of structural steel include rolled sheets and flat plates. Moreover, the steel is to be cut to length according to the project's specifications once manufactured.

In this report, the advantages and disadvantages of structural steel will be discussed. Besides, the 2 types of structural steel will be differentiated and the different types of steel components will be determined too. On the other hands, the usage of bills of quantities (BOQ) and its advantages are to be explained. Last but not least, the methods of cost estimating will be included.

In addition, a case study was prepared to show the taking-off and the costing. With the taking off process and rates that obtained from the builder of the project, a set of bills of quantities will be done completely by using BuildSoft software. For the quantities, the descriptions are all based on Standard Method of Measurement 2 (SMM2).