

**INTERACTIVE” STEEL PLATE GIRDER ANALYSIS & DESIGN
COMPUTER PROGRAM
FOR BENDING MOMENT CAPACITY**

By

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DECLARATION BY THE CANDIDATE

I (Siti Zubairiyah Binti Al Zubir, 2003339771) confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

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Grace, Salam to Nabi Muhammad S.A.W .*

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ABSTRACT

The study focused on the development of a computer program for steel plate girder design by using a **Visual Basic Application (VBA)** which is embedded in Microsoft Excel. The analysis and design is base on **BS 5950:2000**. It develops for an academic computer program for designing moment capacity of steel plate girder structure and produces a user friendly computer program to assist the lecturer and student. The new developments in the computer program are producing graphical information, have detailed calculation step output of the moment capacity plate girder design that helps the lecturer to teach. The general loading analysis can analyze any possibility of load configurations. Programming as it relates to spreadsheet use is essentially the process of building application that use a spreadsheet rather than a traditional programming language such as VBA or BASIC. The advantages of using spreadsheet application are to provide the appropriate solution to the problem, it also produces accurate result and user interface is clear and consistent, so that the users always know how to proceed.

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