Thesis Title Computer - Aided Strip Layout for Blanking Dies

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Abstract

Computer - Aided Design and Computer - Aided Manufacturing has played an important role nowadays. However, computer applications in strip layout design are only in a small number. Therefore, this research aims to develop a computer program to increase efficiency on the design of strip layout for blanking dies which taking an account for various design factors and user requirement. A number of design algorithms and techniques have been developed and applied to attain a solution based on user specifications (ie. minimum total cost, maximum utilization percent etc.). These developed techniques are unique and specially design for this program.

This program was tested by a number of actual workpieces and the results are compared with actual designs by professional engineer. In addition, one of outstanding features of this program is that users can investigate alternative results when some factors or targets of production change.

Keywords: Computer Application / Strip Layout / Blanking Dies