EVALUATION AND ANALYSIS VARIOUS TYPES OF WELDING IMPERFECTIONS COLLECTED FROM THE STEEL FABRICATORS

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"I declared that this thesis is the results of my own work except the ideas and summaries which I have clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree."

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ABSTRACT

This report presents the analysis of various types of welding imperfections that were collected from a local fabrication contractor. These imperfections may occur unintentionally and repeatedly because the causes were not understood or the existing remedies were not effective in preventing them. The target of this project is to analyze the causes of welding imperfection as well as to propose the remedies in preventing them. Samples were collected from an identified local steel fabricator company and tested by Non-Destructive Test (NDT), example radiographic test, and Destructive Test (DT), example macrostructure test. All data and sample descriptions of welding, like sketches of welding imperfections, imperfection photography, macrography and NDT radiography were tabulated on a detailed chart. The causes of all these imperfections are analyzed based on the code of practice, the remedies are proposed and tabulated. The report presented in the chart is invaluable to all parties dealing with welding industries such as welders, supervisors and engineers.

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