

EVALUATION AND ANALYSIS OF VARIOUS PIPE

JNIVERSITI

WELDING IMPERFECTIONS COLLECTED FROM

THE GAS PIPING FABRICATORS

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"I declared that this thesis is the result 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 the imperfection in various types of pipe welding that were collected from a local pipe 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 imperfection in pipe welding as well as to propose the remedies in preventing it. Samples were collected from an identified local pipe fabricator company and tested by Non-Destructive Test (NDT) example radiographic test and Destructive Test (DT) example macro test. All data and sample descriptions of pipe welding like the welding process, the material size, the types of material, radiographic pictures, macrographs, sample pictures and sketches were tabulated on a detailed chart. The causes of all these imperfections will be analyzed based on the code of practice and the remedies will in turn be proposed and tabulated. The report presented in the chart would be invaluable to all parties dealing with piping fabrication.

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