

# **DETERMINE MARTENSITE AND TEMPERED MARTENSITE STRENGTH AND HARDNESS IN LAB WORK-PIECE**

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## **ABSTRACT**

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In this report, I will explain what are martensite and tempered martensite and how they are made. I will also describe the methods I used to make martensite and tempered martensite from mild steel (ASTM A36) lab work piece. Besides, the problems I faced during this project and the solutions I used to overcome them will be discussed.

For the outcome of my project, the results of the tensile and hardness tests of the work pieces will be shown in this report. Tables and graphs will be used to analyze the data obtained from the tests. The theories and information from my researches will be used to explain and discuss the results I obtained so that a conclusion can be reached.