

**DESIGNING AND CONSTRUCTING AN  
AUTOMATED BOTTLE CRUSHER**

By

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**STATEMENT BY THE AUTHOR**

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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**ABSTRACT**DESIGNING AND CONSTRUCTING AN  
AUTOMATED BOTTLE CRUSHING

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The concept of this machine is as a project from PT. Tayoh Sarana Sukses to process plastic bottles become plastic resin and also to solve the problem of plastic waste, and the focus of the project is on crushing the plastic bottles and monitoring. This machine is the next station of bottle sorting station. After the sorting process, the bottles will go to crushing station one by one approximately every 3 seconds. First the bottle will be detected by the sensor, it uses to count number of bottle going to this station each day. Then the plastic's knife will crush the bottle and the result after crushing can be recycled into raw material for making plastics.

*Keywords: Bottle Crusher, Bottle Plastic, Plastic Recycling, Automated Bottle Crusher*



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## DEDICATION

I dedicate this thesis to Jesus Christ who gives me strength in all I do and make it all possible. To my parents and families who give me support in finishing my study, to lectures, friends which help me in doing this thesis, also to the future engineer who will continues the spirit of engineering and give the color to the world.



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