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SPECIMEN

DESIGN OF AN ATTRACTIVE ALUMINUM TIN  
CRUSHING MACHINE.

BY

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Project Report

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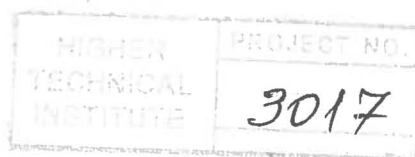
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## SECTION 1:

Introduction to recycling and the problems that consumers face dealing with the recycling problem.

## SECTION 2:

Alternative ideas to the problem of disposing the tin, to a limited space.

## SECTION 2:

Alternative ideas in using mechanical methods, in the crushing of the tin.

## SECTION 3:

Flow diagram of what components will be used in the final design.  
(flow of components are only the main components.)

## SECTION 4:

Calculations to find the maximum crushing force on the toughest tin (Mr. Brown coffee).  
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## SECTION 5:

Detail drawings, involving dimensions, materials and electrical installations, that are used for the manufacture of the project (Mr. crusher).

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Cost list for electrical components, screws and other parts, that have to be bought.

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## SECTION 9:

Conclusion, a few words on the final product and its abilities.

## INTRODUCTION:

Recycling plays a critical role in the manufacturing business. Companies invest millions of pounds on recycling plants worldwide, and this proves that recycling products must be taken up by people more seriously.

The consumer is directly concerned with recycling, because it is the consumer that handles his/her waste products.

Let us consider a question, " WHY IS RECYCLING SO IMPORTANT".

To fully understand the answer to this question, we will take for example a normal family of 4 people.

If every person consumes an average of 2 cans of soft drinks daily, then the whole family would have consumed roughly around 54 cans per week.

The word (aluminum can) to a person means nothing because he/she is missing out on the real picture behind the word. An average coke can weighs around 30grms, that means that the family is entitled to 16.2Kg of aluminum every week which in turn is all thrown away in a dump yard. The average price of pure aluminum is 5\$/kg.

Converting the family's weekly consumption into money makes a total of \$81.

This total is meaningless if we count all the people around the world consuming soft drinks (we would be talking about billions of dollars worth of material thrown wrecklessly away).

Another question that must be considered by the consumer is “what am I to gain out of recycling”.

There is no correct answer to this question because it is rather psychological, depending also on the person's attitude about helping others.

Firstly -- the consumer by recycling his/her products into the different recycling bins would be helping to lower the labour cost of workers gathering products from scrap yards.

Secondly -- more space in people's garbage bins would be present to throw products that cannot be recycled.

Thirdly -- the dump yards would be much cleaner, consisting of lower volume waste products and also it will be much easier for workers to clean the dump yards.

The above three facts are seen to play a role with the mental way of thinking of the consumer. Another way of thinking towards recycling of aluminum cans is considering a car which is empty on gas. Will you throw it away and leave it to rot, or go to a petrol station and refill it?

Exactly the same with aluminum cans, it does not mean that when a can is empty there is nothing more it can serve.

The consumers do not bother saving their disposals because it usually takes up space and time.

It can be also unpleasant for some people to live in the same place where you have scrap materials saved up.



The big problem concerning the consumer is the mental state of mind. A person thinks “ why must I save up my disposals,gather them in plastic bags,put them in my car and throw them in a large plastic bin in front of a whole crowd?”.

Their is a certain degree of sense into this thinking because nothing will be gained by that person.

A very big disadvantage concerning recycling bins,is that they are huge and bulky therefore they cannot be left anywhere(including: shopping centers,pavements, in front of supermarkets etc.)

The only solution to eliminating large bins,and to make the action of recycling much more fun is to have a revolutionary can crushing machine,comparatively small in size,attractive so it can be situated anywhere(internal as well as external areas),and most importantly to thank the consumer by giving out a sticker to every can that is crushed.

“THIS SOLUTION IS NOT TEMPORARY, BUT A PERMANENT ONE”

presenting the revolutionary:

“MR. CRUSHER”