PROTOTYPE DEVELOPMENT OF MULTI BLADE POTATO SLICER

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ABSTRACT

The scope of the project is to develop Potato slicer attached with multi-blade as compared to the regular Potato slicer to provide to use both alternatively in domestic & Professional Fields, intended to attract hot potato chips makers. Details of the product development and its features are enclosed.
Professionals & Home makers are the large market for Household Manufacturers. Many Manufacturers have developed various strategies to attract the Home makers & Professionals.
As student of M-Tech (Product design and Manufacturing), we have made an attempt to address this target group by developing different strategy of providing multi-blade potato slicer which helpful for Home makers & Professionals. In general, this project covers almost all the phases of product design and development.

INTRODUCTION:

In Domestic field & Professional life situations like that where a home maker or Professional may need to use potato slicer to make potato chips. Usually, regular potato slicer is used by small and medium range hot potato chips maker, but it consumes both time and energy of the chips maker because of its single blade. By introducing multi-blade in potato slicer, we can save the energy and time of the chips maker.
Potato slicer with multi blade will not only save the energy and time of the chips maker, it also increase the production rate of the potato chips. For example slicer with three blades will increase the 3 times production of the regular slicer.

MATERIALS AND METHODS:

In this project, since the elements are minimal, only the basic design of the product is discussed and represented in the pictures.

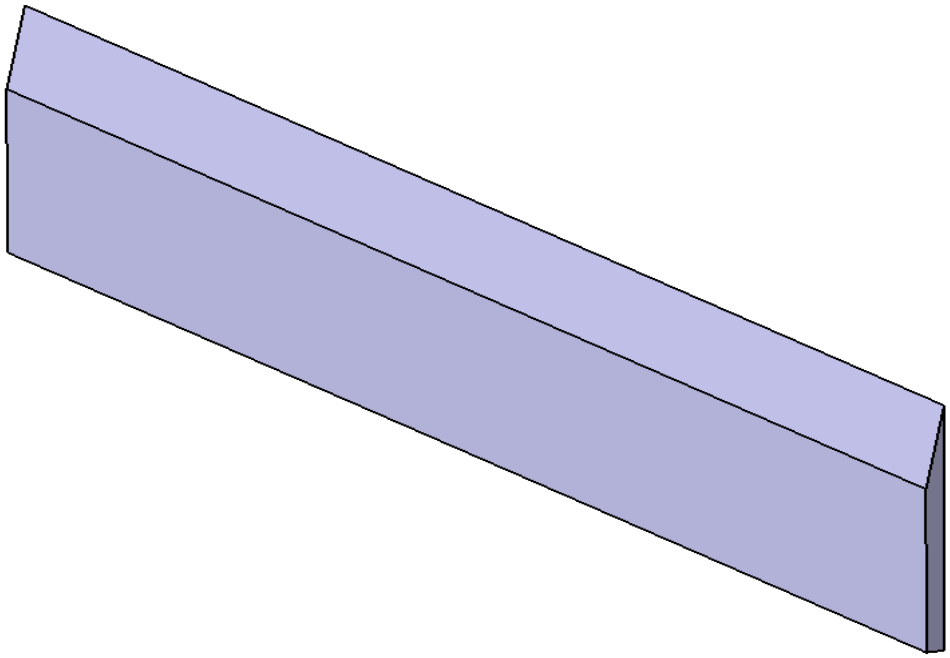

Figure No: 1(Grinded Hack Saw Blade**)**

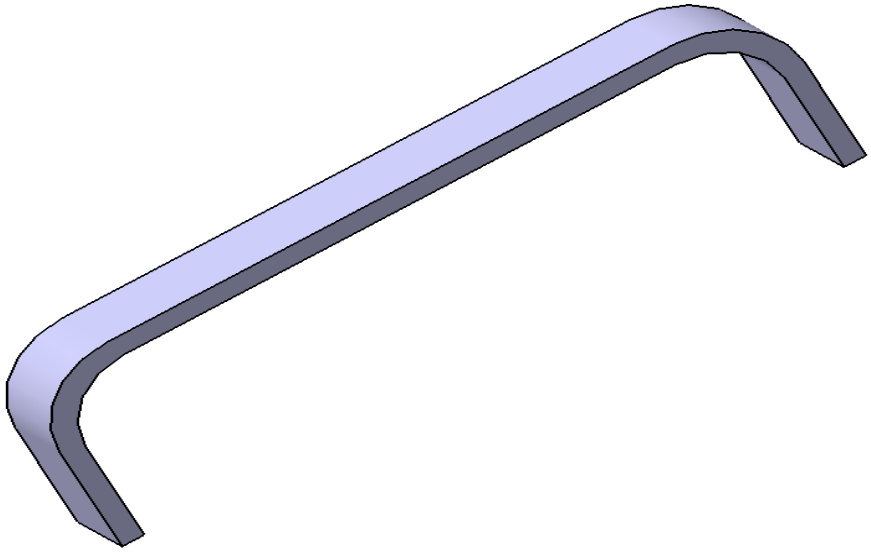

Figure No: 2 (Handle

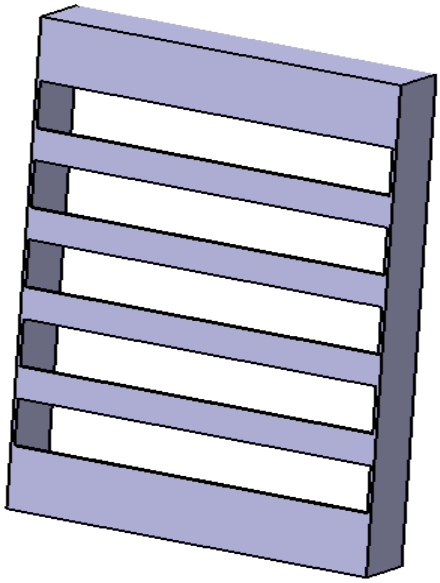

Figure No: 3(Frame)

In the above figure we can clearly note that Potato slicer with multi-blade
In this concept it is considered that the Slicer is standard parts.
Potato slicer body made of Mild steel.

DETAIL DESIGN:

Details of Design shown below

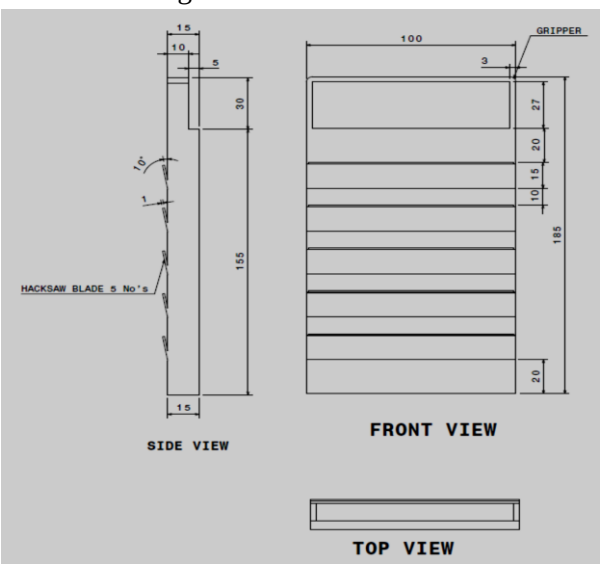

Figure No: 4 Design And Details

PROTOTYPE:

Now that the detail design is completed, prototypes have been made. For the prototyping, we selected available Potato slicer which modified according to our design. The Photos of the same are as show below (POTATO SLICER WITH MULTI BLADE)

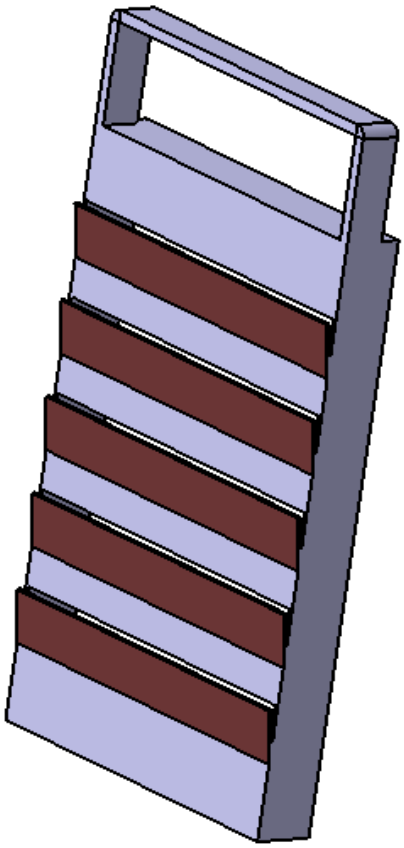

Figure No: 5 PROTYPE

RESULTS:

After the fabrication is over, trial has been done. We tested with potato which found satisfactory result.
Thus we have achieved the target of high rate production of potato chips with lesser time and low energy.

CONCLUSION:

The scope of the project was to "develop a Potato slicer to attract home makers and Professionals to give high rate production of potato chips with a lesser time and low energy & offer special feature not available in the market which will be translated into higher sales".We have been able to achieve Potato slicer with various options. The response was positive & the results were satisfactory from the target market (Home makers & professional).Further we can increase the rate of production by increasing the number of blades. House hold product manufacturers can be approached with a refined prototype to launch the idea into market.

REFERENCES:

1. Karl T Ulrich & Steven D Eppinger, Product design and development, 4th edition, TATA McGraw hill publication, 2009.
2. http://en.wikipedia.org