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Consumer Product Design

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Consumer product design is the process of creating new product through a combination of art, science and engineering to increase user satisfaction and to improve its marketability. Consumer product design is the study of both functional and aesthetical aspects; and understanding of the connection between product, user and his environment. Consumer product design is one of the industrial design specializations. It attempts to improve social innovation and design for comfortable lifestyle. Consumer product design focuses on three aspects: personal, universal and industrial products. Specific product can be considered as Consumer Product Design which include personal care, home appliance, office products, children's toys, medical product, vehicle accessories, sport and leisure product, agriculture product and machinery. The characteristics of consumer product may include the overall form of the object emphasizing several elemental functions such as reliability, effectiveness, usability, ergonomic and safety. The shape, colour, appearance and semantic are vital in supporting the aesthetic value within the production of a good quality consumer product design.

Jury Review

Khairul Aidil Azlin Abdul Rahman

The speed of technological and demographic changes is rapidly increasing and hence our culture will be affected by them. Our problems are getting more and more complex. With regards to these complexities designers create either tangible or intangible value through their creative works as innovative solutions for human beings. Designers are problem solvers. They are presented with numerous choices of ideas when preparing their designs for manufacturing. They must be well-informed and possessed knowledge about how their designs can be produced efficiently and effectively regardless as a professional or as a student. In the end, the most important aspect is that various design methods or results have to reach a definite form and function.

Multifunction Kitchen Stool, Fiskcube, Clean Nice catfish cutter, Bubu were inspired from a basic simple cube form. Anything can be achieved through a designer's creativity. As a result, the object can reveal their capabilities through smart solution. Currently, environmental concerns are demanding that every product should be sustainable, not just in term of its materials but in terms of its ability to maintain enduring and meaningful everyday uses. The products presented limited functional evolutions and are of classic typologies which tend to differentiate through distinctly contemporary attention to form and honest representation of old and new materials.

The design continues to push with a powerful combination of human needs, technological and material advancement which are the forefront to the product design. It ensures that the object of tomorrow resemble less the object of yesterday. Designers of these wares traditionally pushed productivity and efficiency through a combination of ergonomics and styling. Designers are keen to seek an ever-expanding roster of physical technological solution. This can be seen in the innovative design of Rubber Tapping Knife and the Iridescent Scroll.

Apart from specializing in the desired design, understanding and exploring across intra- and interdisciplinary boundaries will surely give better insight. In addition, it will also provide a holistic experience and a deeper understanding of what integration means to designer. The current challenges include culture and identity, research models, application of design thinking, education approaches, university-industry commercialization strategies and the future direction. Collaborative environment in the design discipline is to carry a task with the industry or a forward society. These are likely to be the boldest design challenges of all.

Rubber Tapping Knife

Raja Ahmad Azmeer Raja Ahmad Effendi & Mat Rasol Sidek

Malaysia is responsible for the production a third of the world's rubber export and has a good reputation internationally for its high quality and well-priced rubber products.

Since 2001, Malaysia's rubber production has increased but the process of rubber tapping is still carried out in much the same way as it has been for centuries - by hand. Although the tapping work is still applying the conventional laborious method, there is a need to improve the rubber tapping knife in terms of ergonomic, material and safety. Therefore, a qualitative research has been carried out to solve this issue.

Based on the gathered data, a new design of rubber tapping knife was produced which features various adjustable lengths, a secure grip and a suitable material made for its handle and a hook which is easy to carry and to store. Insect repellent is also included into this design to ward off mosquitoes and other insects. The new rubber tapping knife design is expected to enhance the contribution of rubber in the agriculture sector for Malaysia's economic growth.

■ Bazlinrekha Mohd Nawi & NurHusna Yahya
ID registration:13-01378-0101



Bream Deep Sea Bubu

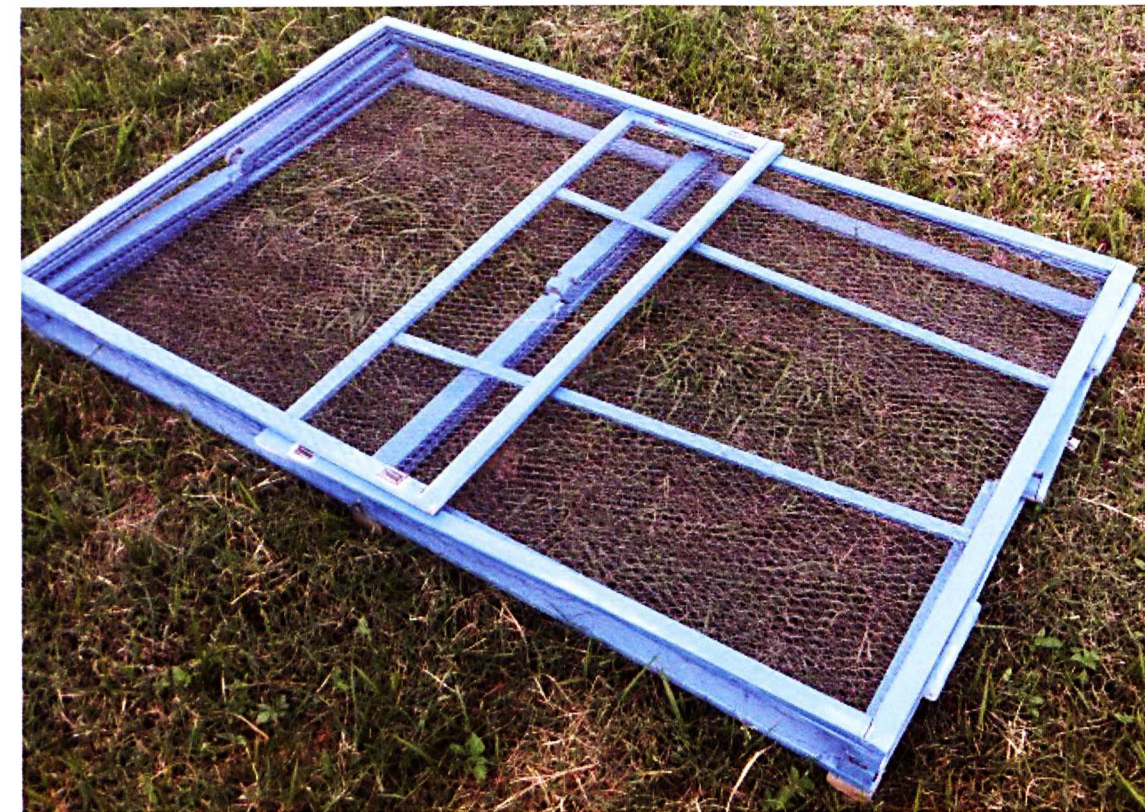
Zulkiffi Muslim & Mohd Sharizal Dolah

Bubu is a traditional fish trap used by Malay fisherman. Information about bubu saltwater resource is a very limited. This research site is located at Penyabong, Endau Mersing where the position of a trap placement was at the depth of 200 meters. The purpose of this project is to identify the problems faced by fishermen using Bream Bubu 'Bubu Kerisi' during fishing activities.

From the study, it was discovered that there are many fisherman who preferred to use traditional bream fish trap in the area. This was due to several factors such as materials to make traps were easily available locally and the cost of making the traditional Bream bubu was cheaper. The main problem faced by the fishermen is the place to put the traps was limited due to their

large sizes. Another problem encountered includes the process to carry a trap into the sea and to bring back the fish traps.

The objective of the project is to increase the income of fishermen by using a new and efficient design for a Bubu trap. The Bubu design is more efficient in terms of functionality, foldability, durability and portability. The expected finding from this study is the production of a new design for the bream Bubu which could increase the production of fish in the future.



■ Nurul Alsikin Mohamad
ID registration:13-01376-0101



Clean Nice Catfish Cutter

Mohd Faiz Yahaya, Mohd Shahrizal Dolah & Mohd Azali Abdul Rahim

High demands for catfish product give opportunities for catfish farmers especially SMEs to expand their markets. In order to increase the production due to the high market demand, new and effective equipments are needed to speed up their work and reduce the production time. Clean Nice is a catfish cutter and can be operated by a single person. It has 3 protective slots to hold more fishes before cutting.

A special blade is proposed in the design to cut the catfish and also to remove the waste. Moreover, the blade can be manually adjusted. To maintain the cleanliness while working using this product, a container to collect the catfish waste and a proper drainage system are also provided.

■ Masnee Sabari
ID registration: 13-01523-0101

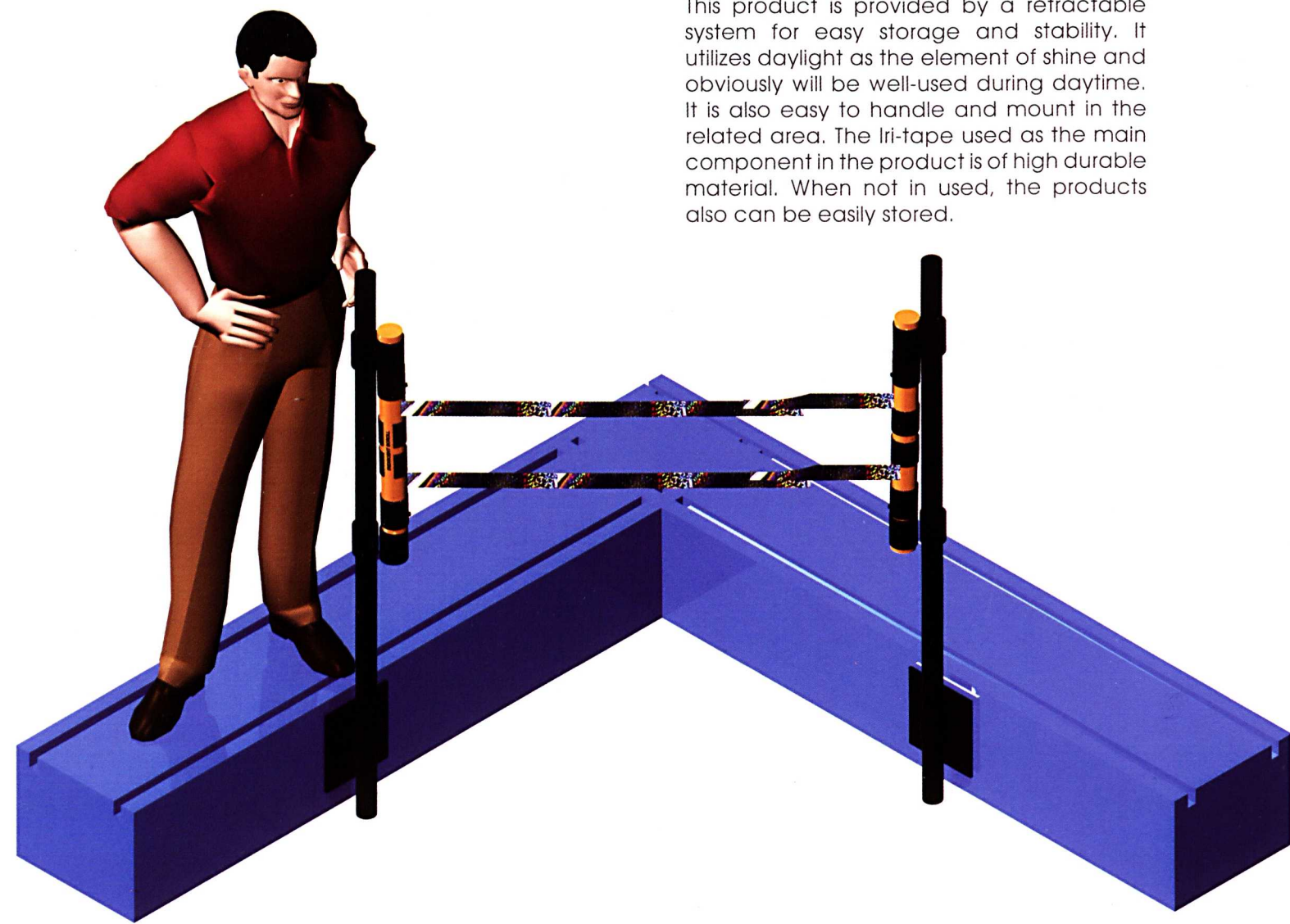


Iridescent Scroll

Mohd Faiz Yahaya, Mohd Shahrizal Dolah
& Raja Ahmad Azmeer Raja Ahmad Effendi

One big problem for fish farms is they always attract birds. Iridescent Scroll is designed to utilize sight and sound to chase birds away from the fish farming area. The iridescent material shimmers and shines in the sunlight and help to disorientate and cause confusion to any birds that catch a glimpse of it. Furthermore, it also produced a metallic noise as it flaps in the wind, adding an additional threatening sound to keep pest birds away.

This product is provided by a retractable system for easy storage and stability. It utilizes daylight as the element of shine and obviously will be well-used during daytime. It is also easy to handle and mount in the related area. The Iri-tape used as the main component in the product is of high durable material. When not in used, the products also can be easily stored.

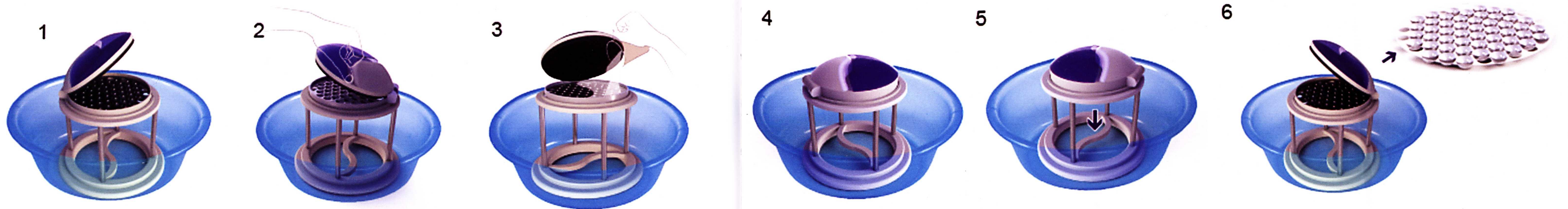


■ Muhamad Mawardi Mat Yunus
ID registration: 13-01525-0101

Fish Ball Molding Tool

Raja Ahmad Azmeer Raja Ahmad Effendi & Mat Rasol Sidek

Fish ball is considered as a hugely popular food in most Asian countries. In Malaysia, the fish ball industry is dominated by small and medium-scaled companies. Most of these companies are in the states of Johor, Kuala Selangor, Terengganu and Kelantan where the traditional way of processing fish balls is employed using manual tools. This method maintains the flavour of the product but the process is monotonous and the tools used are not convenient and time consuming.



The qualitative and quantitative research methods were carried out in order to obtain data and information about user knowledge and problems regarding the existing fish ball processing methods and tools. Based on the gathered data, a new fish ball processing tool was designed to simplify the process and increase the production of fish balls in shorter time.

In addition to incorporate ergonomic considerations, the final design provides semantic functions which made the newly-designed moulding tool comprehensible to users and perceived hygiene.

■ Yap Pei Chi
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