

## HIGH BARRIER AL. FOIL LAMINATE AS INNERMOST PLY OF MULTIWALL SACKS



**Company:** SAFEPACK INDUSTRIES LTD., **INDIA**

**Description:** Safepack has developed Al. Foil laminate which is used as innermost barrier ply in multiwall sacks to ensure that moisture, odour and taint are kept out while retaining original properties and form of the product packed. A unique key attribute of this laminate is that it is tailored to have a 20 mm of uncoated area at one of its edge which is used for pasting paper to paper to form a tubeduring sack manufacturing.

**Material:** Considering the highly hygroscopic nature of product to be packed, the structure of this laminate is designed in such a way that it imparts 100 % moisture barrier property apart from addressing other requirements as following.

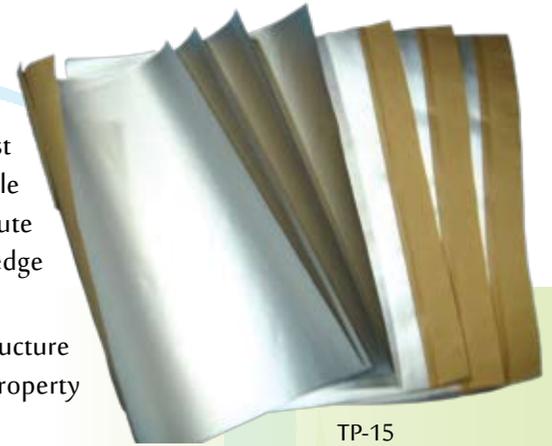
**Size:** It can be supplied seamless upto 1.53 m.

### Inspiration – Unique Features & Benefits:

- Maintaining the consistency of this uncoated 20 mm area was a crucial factor during the production of this laminate.
- Moisture barrier to avoid lumping of product. Ensures retention of aroma and flavor of the product packed.
- Provides excellent stiffness to the multiwall sack.

The user industries for:

- Chemical products like Carbon black, ammonium nitrate, calcium phosphate, Bulk drugs etc.,
- Food products like tea, milk powder etc.,
- Agricultural products like pesticides, herbicides, fertilizers etc.



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## 'NITROS' TRAY



**Company:** PT. BINTANG TOEDJOE, **INDONESIA**

**Description:** 'Nitros' Tray was developed as a new series of secondary packaging to hold the 'Nitros' energy shot, that use thermoforming packaging form (tube), as a solution to previous packaging that use display box. It becomes easy to display, handle and also can protect the tube as well, so it can be put in the chiller/cooler box without worry being broken.

**Material:** The material used for tray is plastic polypropylen (PP) recycle in mould, contains 12 tubes of Nitros. By using PP recycle it has been more environmentally friendly.

**Size:** The size dimension per unit of 'Nitros' tray is 15.4 x 11.2 x 5.0 cm (height x width x depth)

**Inspiration:** 'Nitros' has many problems with previous secondary packaging that use display box, because as a beverage, Nitros has been laid carelessly in a shop window, as to be invisible. In display box, Nitros also may not be stored in chiller/cooler box. Started from the concept of tray for eggs, then developed tray for Nitros tube.

## SPRAY SEATS COUSHINING STRUCTURE THAT CAN BE EASILY ASSEMBLED BY ANYONE

● Company: TOTO LTD., JAPAN



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**The application and the function of packing:** Tridimensional cushioning structure that only requires insertion into the cardboard openings.

Maintaining the same level of protection as before, it can easily be assembled by anyone.

Also, by reducing the amount of materials used, CO<sub>2</sub> emission has been cut by approximately 46 tons per year.

**The used packaging material:** Only corrugated board

**The size of an exhibit:** L:599 × W:479 × H:150 (mm)

**Information on additions, such as a design concept and an idea:** Consists of only 1 piece of cardboard.

By turning the tridimensional cushioning structure upside-down, it can also be used as a container to store parts.

Level of cushioning performance can be easily controlled by changing the height and angle of the walls.

## TAPELESS SEAL OF THE 13ZJ TANK RETURNABLE CARTON BOX

● Company: TOTO LTD., JAPAN



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**The application & the function of packing:** I cost-cut it by making a returnable carton box & can perform CO<sub>2</sub> discharge reduction at the same time. I designed the structure to easily open & close without using tape. In addition, the box which devised partition, & was designed compactly. Therefore transportation efficiency is good.

**The used packaging material:** Only corrugated board: K210x(SCP120x3)xK210, AB/F

**The size of an exhibit:** L639xW454xH411(mm)

**Information on additions, such as a design concept & an idea:** The trouble using the retractable knife decreases by making the top surface of the box a tapeless seal. And a working hour of the opening & closing is improved. In addition, I improved the safety for the work by not using a retractable knife.

## A UNIQUE STYLE BOX FOR SIX WINE BOTTLES

 **Company:** COMPACK SYSTEM CO. LTD., JAPAN

**Applications and feature of the package:** Place the bottles on its side. Change the package style to sideways.

Using the divider and fitting it to the shape, it can be fixed on left-right reversal style.

**Packing material:** Cardboard

**Size of the package:** Outer size ; 313×270×182(mm)

**Design concept and other information:** To lay down the bottles, they are fixed for the label when opening the box.

By using divider and its cushioning properties, bottles are fixed on reversal.

Success to volume down the box and decrease any cost such as material and delivery.



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## CORRUGATED BOARD BULK PACKAGING

 **Company:** RECOH LOGISTICS SYSTEM CO. LTD. & NAKATSUGAWA PACKAGING INDUSTRIAL CO. LTD., JAPAN

**Description:** To pack a large volume of powder in all corrugated cardboard containers of low cost.

When the filling is poured into the developed package, the inner frame swells to be nearly round to disperse the pressure of the filling evenly.

**Material:** Made of all corrugated cardboard excepting a bag into which the filling is poured directly and bands for final overall fastening.

Pallet also made of corrugated cardboard.

**Size:** Sized to 1100×1100×750mm (including a pallet).

Can pack the filling of approx. 500L.

**Inspiration:** Shell framework composed of an outer tetrahedral frame and an inner polygonal frame.

Each face adjoined adhesively, making the package foldable. Easy to store parts storage, and easy to set up. Square appearance with a pallet to facilitate handling. Stackable within containers and for storage.



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## WRAPBONG - STRETCH WRAP DISPENSER



**Company:** TAE GYEONG M&T, KOREA

**Product explanation:** We focused on body engineering. Wrapping process demand much effort to reach when your goods are too small or too tall. With Wrapbong, your workers don't have to bend their waist during wrapping process with pallets, and stand straight and performing wrapping process in comfortable. You can replace stretch film easily in to wrapbong.

**Functional Features:** Wrapbong also can reduce wrapping cost due to its functionality. Wrapbong grabs stretch film tight to attach film on the surface of your objects. So, you can use stretch film more economically

**Technical Features:** Wrapbong is the essence of the simplicity and comfortable. It was invented to weight lightening (850g), so you can use wrapbong at workspaces, etc.

The logistics these days is fully automated. All the goods are located on the pallets and are wrapped with stretch film. However, wrapping process of sites lag behind the logistics. Wrapbong can innovate wrapping process. As the stretch film market grows fast, the patent will show the way to local and abroad market.



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## FAN X 2 1 9



**Company:** JEBSEN & JESEN PACKAGING (S) PTE. LTD., SINGAPORE

The products that need to be pack include a Fan Airfoil, Motor together with power code, battery and user manual. There must be sufficient space between the Airfoil and Motor to prevent knocking during impact test. We will need to maintain the overall packing size as it's the optimal palletizing size.

**Material:** Recycle paper with combination of kraft and newsprint is being molded into tray to secure and protect the product during transportation.

**Size:** A Top & Bottom Tray was designed to pack the product with accessories. Top Tray dimension is 345mm x 335mm x 33mm and Bottom Tray dimension is 345mm x 335mm x 132mm.

**Inspiration:** A top and bottom molded paper pulp tray was designed with an undercut feature so that we can lead in the fan motor and hold it down firmly. Protruded support rib has been added to protect the Motor and provide a safe distance between the Airfoil during impact. With this new design concept, packing is much simple now and customer has great saving on packing of their product.

**Summary:** We have successfully design a molded paper tray which able to assist customer improve the packing process and reduce the packing cost. The tray design is able to secure the different parts within the tray firmly and protect the product from damages.

## CASE UNIT COMP PARTITION

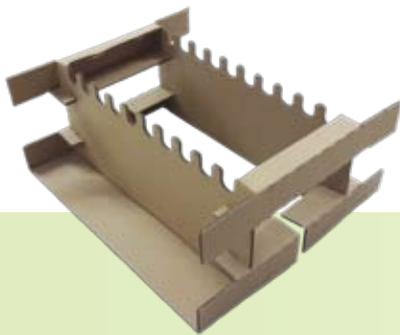
 **Company:** THAI CONTAINERS GROUP CO. LTD., JAPAN

**Description:** The partition is made from one piece of corrugated board. The structure can be molded by hand and put into a box. The design is easy to assemble without glue. It designed for transport “Case Unit Comp” (Electric kettle part) from manufacturing plant to assembly plant.

**Material:** Partition was made by single wall C-flute with 100% recycled fiber.

**Size:** 357 x 305 x 150 mm (2 pieces/carton)

**Inspiration:** Packaging for transportation appliance parts between factories. The Partition use materials that can recycle 100% to replace the foam. Products is designed to be suspended inside the box to protect from external shocks. Meanwhile, it can be assembled easily without glue by a one-piece design. Finally, the design still provides sufficient protection.



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