



BEST RECYCLED PLASTIC PRODUCT **PRODUCT** AWARD 2017 INFORMATION

Company - Counterplas Ltd - UK

Product - Loft Stilt from 100% recycled polypropylene



There was a gap in the market for a product that would enable the consumer to take advantage of using the maximum thickness of loft insulation (270mm) but still have a usable loft floor for storage. The 'LOFT STILT' was designed in collaboration with Birmingham Innovations. The idea was to create a product that would raise the floor height in a loft space to enable the home owner to achieve a maximum insulation thickness of 270 mm and maximise their energy saving efficiency, whilst still maintaining a useable loft storage area. The environmental advantages of this product were further maximised by specifying a recycled polymer to benefit the environment. The product is distributed via major DIY retailers and ticks all the environmental green boxes.

The challenge was to create an environmentally friendly product that saved energy in the home by allowing the homeowner to use the maximum thickness of loft insulation in their property, reduce their energy bills and support the government's 'green energy saving' policy. The product had to be easy to fit and robust enough to take the weight of standard loft flooring and the usual items stored in a loft. The Loft Stilt met all the objectives and more.

The Loft Stilt went through a number of design and development stages including initial concept drawings, prototype single cavity tooling, tool trials, product sampling and multi-cavity production tooling. An initial batch of Loft Stilts were promoted through a number of major DIY retailer stores to gauge the consumer's response which was a resounding success. The Loft Stilt has continued to be a best seller throughout the UK in helping the home owner save energy and 1,000's are being sold every week. The success story has spread across 'the pond' to the United States where the largest DIY brand in the world is interested in stocking the British Loft Stilt!

All deadlines were met regarding product design and development. The product material 100% recycled polypropylene went through a number of trials and tests. One being the loft stilts when supporting a normal loft floor would have to be strong enough to take the equivalent weight of a Mini Car but soft enough for screws to pass through them for fastening to joists. This was an extreme request but the loft stilts passed both tests with flying colours!

In the UK there are a number of roof joist sizes and the one design of loft stilt had to be capable of accommodating the variety of sizes which it does.

The Loft stilts are made from 100% recycled polypropylene and was designed to be lightweight, robust and easy to install. All sprues and plastic waste from the loft stilts are recycled and re-used in other products thus reducing carbon footprint.



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Company - INCOPLAS sa/nv

Product - EUR range Bottles 3 to 5, made with Total's HDPE Circular Compound 50% PCR



To answer the market's request of a standard bottle made with a high percentage of recycled material and with performance at least in line with bottles made with virgin material (no odour; high ESCR, same vertical compression resistance).

The key objective was to replace virgin HDPE resins with a product usable in mono-layer extrusion with a high consistency of properties and production parameters. In addition, the request of a good transparency close to natural virgin material was mandatory. The final target was to achieve bottles with a quality at least in line or superior to bottles made with virgin resins.

Since 2015, Incoplas has tried several solutions with recycled content, including the first rPE from Total with 25% of recycled material. The results of those trials have shown the outstanding performance and economy of Total's proposition and when Total proposed a 50% rPE we found the perfect match to make an important step toward the circular economy for plastics packaging.

The use of recycled material was difficult related to material availability, material quality and processing complexity and cost. Through months of deliveries and trials, Incoplas found a precious collaboration through Total partnership offering supply guarantees, product consistency and easy processability.

Incoplas understands they are the sole company offering from all their plants a regular industrial production of a range of standard products from 3 to 6; uncoloured, fragrance free, high ESCR, excellent vertical compression resistance with a content of 50% of post consumer recycled material. This will allow Incoplas customer to reduce their carbon footprint of their packages and to participate to the circular economy.

50% minimum of Post Consumer Recycled material from bottles collected in Western European countries.



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Company - Papier-Mettler - Germany

Product - Reusable Tesco bags for life made from Tesco back of store waste



Based on the increased awareness within Tesco, of the EcoLoop brand, Papier-Mettler wanted to create a product that developed the idea and brand to the next level. Already having a successful sorting process recycling Tesco distribution waste, managed by Eurokey Recycling Group; Papier-Mettler wanted to work with Tesco to take it even further.

The idea, was to introduce a reusable bag for life made out of recycled plastic packaging using Tesco back of store waste such as pallet- and multipack wrapping. It is an exciting development in the collaboration between Tesco and Papier-Mettler in relation to our EcoLoop brand and waste recycling. Tesco are the first retailer in the UK to offer bags made of their own back of store waste.

This process includes waste film collection, shredding, washing, re-granulation and material quality control. Papier-Mettler saw a perfect association in offering an even greener EcoLoop bag for life to a valued long term customer by using Tesco back of store waste. The clear intention was to supply carrier bag solutions to Tesco within a closed loop system.

The carrier bags are made from EcoLoop material and have the “Blue Angel” eco-label accreditation. The bags have been compared with other bag types in an eco balance study carrier out by EMPA (Swiss Federal Laboratories for Material Testing and Research). Based on all gained third party information and facts, Papier-Mettler believe that EcoLoop is the greenest carrier bag raw material on the market.

Supermarket shoppers should be motivated to “Reduce, Reuse, Recycle” carrier bags. By making all necessary steps leading up to the official decision to purchase EcoLoop bags for life in a closed loop supply from Papier-Mettler, Tesco enabled their customers to support the environment in a simple but also most efficient way. Back of store waste is no longer landing on landfill, it is now given an extended lifecycle in the EcoLoop circle ending up as useful product. The estimated tonnage per annum of Tesco plastic waste being converted into EcoLoop bags for life is 1800 tonnes,

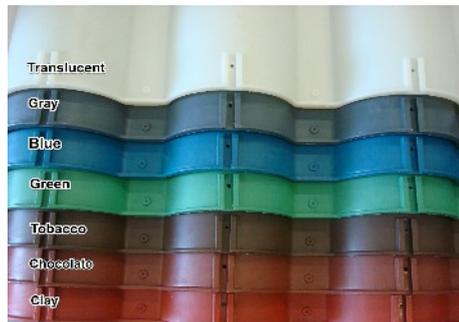
The carrier bags are made from 100% recycled LDPE. Inline with the “Blue Angel” eco label accreditation at least 80% of the used raw material is post consumer plastic waste with the remaining 20% being made up of recycled industrial plastic waste from the manufacturing process at Papier-Mettler. Papier-Mettler production includes collection of rain water, catalytic air converting, renewable wind farm and solar energy and heat recovery. As a result of this process EcoLoop carrier bags are saving up to 60% CO2 compared to conventional carrier bags.



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Company - Roofeco System SL - Spain

Product - Engineered Modular Spanish Rooftile System



Conventional Spanish roof tiles are made out of clay requiring a lot of electricity to produce, they also do not stand hurricanes, easily filtrate water, do not stand temperature changes (i.e. -40°), are porous, hold water, require a lot of materials to support the roof structure due to the weight and installation is slow. The recycled plastic roof tile offers many advantages:-

1. Enlarge life cycle of plastics (reuse).
2. Less CO2 emissions.
3. 100% waterproof, can stand -40°C .
4. Improved mechanical properties.
5. Plastic waste from cutting can be thrown in the yellow container for plastic recycling.
6. To have in one panel 4 tiles together, showing an appearance of a single tile when installed.

The product weight is 70% less than conventional Spanish roof tiles. Installation is quick, approximately 1 hour/30m². The tiles are easy to install for Do it Yourself sector. The tiles are maintenance free. The tiles are environmentally friendly, sustainable with nano technology additives prevent aging of the material. The tiles come with a 20 year warranty.

Exports have been made to Guatemala, Costa Rica, Belize, Mexico, USA, Poland, Germany, England, France, Belgium and Africa. Sales are made on-line promoted by the Web-page. Roofeco are constantly researching new additives especially to prevent aging and are now testing two products.

The tiles have an anchor system that connects tile to tile, keeping the screw hidden in the overlap to prevent water filtration through the screw (patented) and to keep the roof with a neat, natural and aesthetic surface view. The roof is light, does not break and it is maintenance free. The size of the 4 tiles panel is ideal to show a single tile roof when installed, bigger panels cannot show this aesthetic Spanish tile good looking appearance.

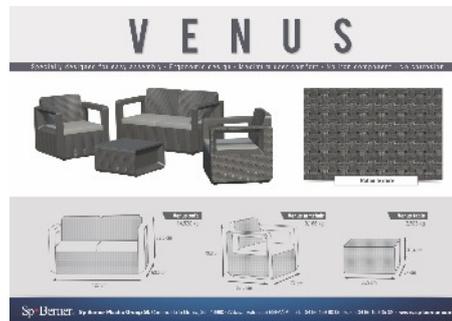
The tiles are made from 95% recycled plastic from recyclers + 5% conventional and nano additives. Currently, the raw material that Roofeco are using is the plastic used for greenhouses in Spain. The patented anchor system (hidden screws that avoids water filtration) also allows for air ventilation inside and out the roof, this protects the roof from condensation, humidity and concentration of hot air.

This product offers new jobs with this innovative product, and integrates a relationship among economy, society and environment.



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Company -SP-Berner - Spain
Product - Venus Set



Sp-Berner has always been very aware of the importance of minimizing the environmental impact on the planet. In 2008 the company opted for the creation of their own recycling plant where they could obtain their own recycled raw material to manufacture some of our products, such as the Venus Set.

Sp-Berner, goes beyond mere compliance with environmental regulations, promoting and contributing actively to the conservation of the environment. Sp-Berner was recognized in 2011 by the Economic News magazine as one of the more innovative companies in the sustainability section, for the manufacture of the new cleaning line ECO made of recycled plastic materials. This commitment was later introduced to the Sp-Berner furniture category, and specifically to their latest creation, the Venus Set.

This demonstrates the clear commitment that Sp-Berner undertook some time ago, in the development of useful products, quality and environmentally friendly.

The product was launched in 2016 to retailers, both nationally and internationally.

The Venus Set was launched with a specific sales target included in a business plan for at least the next five years. In its first year of life the Venus Set has met its sales target.

The Venus Set was born out of a consumer need to achieve an innovation in in the furniture sector that meets design and quality at the optimal price and also contributing to a more sustainable world and committed to the environment. The Venus Set is made with 30% recycled plastic from post-consumer material. With this, SP - Berner have met the needs of their market with the replacement of the use of virgin plastics for recycled ones. With those recycled plastics being made their own therefore saving energy and reducing carbon footprint.

The product was launched in 2016 in the retail channel both nationally and internationally and in its first year of life has reached its sales plan.