

Plastics shine at German awards

The 2008 German packaging awards included several innovative plastics designs, writes David Vink

Two of the three awards in the design, equipment and finishing category of the 2008 German Packaging Awards went to plastics based designs. Specialist medical packaging producer Gerresheimer Wilden, together with labelling specialist Schreiner MediPharm, was one of those winners with its Needle Trap product, which now is produced in quantities of hundreds of millions of units a year.

The Needle Trap is a signal-red injection moulded PC part and label designed to prevent accidental injury to medical staff by injection needles – something that happened on some 500,000 occasions in Germany alone last year.

The device folds open to enable the needle to be used, then closes with an audible click for safe disposal. It provides cost-effective protection together with easy handling. In addition, it does not prevent pre-filled syringes being filled on conventional lines.

Gerresheimer Wilden developed and moulds the part, which is designed to be applied like a normal label to minimise impact on the syringe production and filling process. This makes the Needle Trap an especially attractive solution for low margin medicines, Gerresheimer Wilden says.

Medical technology product development team leader at Gerresheimer Wilden, Herbert Argauer says it was a

The polycarbonate Schreiner MediPharm Needle Trap, moulded by Gerresheimer Wilden, provides cost effective protection for medical staff



challenging part to design. "The needle must easily engage in the small prongs of this [the Needle Guard] element, yet be securely retained within it," he says.

The other plastics winner in the design, equipment and finishing category was the PinPoint snap-fitting tube top closure developed by Seaquist Closures together with tube producer Linhardt for use in cosmetic and personal care tubes.

Made in PP with a silicone elastomer tip, the conical, automatic closing SimpliSqueeze silicone valve provides controlled dispensing while the 18mm snap-on neck closure can be applied to aluminium, plastic or laminate tubes.

First launched at the Interpack 2008 fair, one of the first commercial applications for the PinPoint closure was the Manhattan Clearface SOS Pickel Stopp acne treatment, which was launched last year on a 10ml tube made by Cebal Tubes Europe.

The Flip-Box EPP insulating box was one of the nominations in the transport packaging category. Developed over a two-year period by Fraunhofer Institut, German company Overath and processor Storopack Deutschland, the 350mm by 330mm by 165mm Flip-Box provides an interior capacity of 19 litres and weighs just 200g. It can carry a 20kg load and is said to be the first foldable insulation box to be made entirely in EPP foam.

The design uses an innovative folding mechanism with integral hinge protection allowing it to be assembled and collapsed within five seconds. Independent testing has shown that contents put into the box at -18°C take 160 minutes to rise just 4°C to -14°C. Contents at 76°C on the other hand cool down in 70 minutes to 55°C.

The V-Press drum from Mauser provides a dent-resistant alternative to steel



Flip-Box is available in a range of colours and can be individually printed or laser engraved. Overath claims that the "unmistakable shape and colour" is one of its biggest attractions to customers.

While the Flip-Box has been designed with private consumers and catering applications in mind, Mauser Kunststofftechnik's nominations in the awards – blow moulded high density polyethylene (HDPE) industrial drums – are both pitched at industrial packaging.

The Mauser L-Ring Drum 4-EX was singled out for significantly reducing the amount of conductive thermoplastic needed to achieve an explosion protection rating. This results in a drum weighing 10% less than conventional equivalents and is achieved by using two thin conductive plastic layers, combined with a conductive connection and optional content earthing using two conductive plastic strips.

Mauser Kunststofftechnik's 220-litre HDPE V-Press was also nominated and is claimed to be the first smooth-walled cylindrical plastic drum, developed as a cost effective alternative to steel drums. The Mauser solution shares internal dimensions with steel drums but provides the advantage of dent resistance. It is pitched at applications for packaging highly viscous products such as silicone-based adhesives and sealants or paint.



Assembled in five seconds, the Flip-Box in EPP from Overath



Seaquist's snap-fitting closure for metal, plastic or laminate tubes