



All types of industrial packaging were on show among the massed booths of the Duesseldorf Messe last month

Packaging on parade

EXHIBITION REVIEW Touted as the largest packaging exhibition in the world, Interpack 2008, staged in Düsseldorf, this past April 24 to 30, certainly lived up to the hype, with firms of all sizes drawn from across the industrial packaging mix taking the opportunity afforded them to showcase their wares

To describe this year's Interpack as big would be an egregious understatement. It was positively Brobdingnagian. Covering all 17 halls at the Düsseldorf Messe fair ground, this year's event saw some 2,744 exhibitors showing off their products and services to around 179,000 visitors from a total of 121 countries. While much of the exhibition catered for the needs of the retail and food sectors, be it in terms of cutting-edge margarine tubs, digital food-on-food printing or a whole host of frankly bizarre-looking process and packaging machines, there was still more than enough on display to catch the eye of any passing industrial packaging user.

One stand that was certainly very hard to miss was that belonging to Germany's Schütz, a company that, like Interpack itself, was proudly celebrating its 50th anniversary this year. An enormous edifice housing its own restaurant, not to mention the full complement of the com-

pany's blow-moulded composite intermediate bulk containers (IBCs) and steel and plastics drums, the Schütz stand even featured something akin to an IBC hall of fame, a retrospective packaging parade of the company's past and present IBC models going back to the very first composite system to hit the market in 1975.

However, despite this historical packaging pageant, there was nothing stuck-in-the-past about the thrust of the company's presence, with Schütz keen to extol the virtues of its new 'Full Service Packaging' concept that, following the opening of its new 60,000 m² production plant in Moerdijk, the Netherlands, sees it not only producing new packagings but also taking responsibility for unit filling, labelling, storage, transport and ultimately unit collection and reconditioning, a service offering of particular interest to overseas customers wishing to export to the continent in bulk rather than having to

less cost effectively package product prior to dispatch.

Suitably protected

In terms of new products, the company's IBC pageant was topped off with the Ecobulk SX-EX-UL. Conforming to the US NFPA-30 standard, this new unit is based on the tried and tested SE-EX design, which features a steel casing that as well as having an electro-static function also protects the contents from light, UV rays and mechanical influences and also incorporates "special fire-preventing materials which fill the space between the steel case and the inner bottle". Thus, with the assistance of a building's sprinkler system, the system's the inner bottle is suitably protected to withstand the ravages of flames for at least 20 minutes, giving emergency responders more time to safely deal with the situation in hand than would be the case with a

conventional IBC.

As well as an in-house developed RFID system "for the management of data throughout the life cycle of drums and IBCs" and a new four-way composite pallet for the LX IBC, Schütz also had in the flesh a number of new plastics drum models, including a 55-gallon (208 litre) version of its F1 tight-head plastics drum for the US market. Developed as multi-trip open head alternative to heavier steel units for viscous substances emptied via a discharge plate system, the new OC-L plastics drum has been "designed in such a way that a drum plunger can easily be mounted thus guaranteeing optimal drainage". Another Schütz open head plastics unit making its debut at Interpack was the SDS-2, a 'single-process' product whereby both the drum and lid are produced in a single blow-moulding extrusion process from a single material. This, the company asserts, guarantees "absolute single-grade quality", something "that plays an important role with regard to both the filling product/field of application and to re-cycling possibilities" while also resulting in a lid and body that "are both extremely resistant to stress cracking".

Similarly from Germany, and likewise operating an impressively large stand at Interpack, Mauser too had on display a diverse array of products, ranging from plastics jerrycans up to composite and metal IBCs. In addition to the new O-Top™ LT plastics drum, which the company asserts is the first 220 litre standard open head drum to be approved for the transport of Packing-Group II (Y) liquids, the company's collection of new products also included the V-press™ Drum, a straight-sided 220 litre open head plastics unit designed to handle high-viscosity products discharged using a pressure plate, and the 4-EX™ 220 litre tighthead plastics system.

Reduced weight

Representing "a refinement of its well proven three-layer concept for EX zones," Mauser's new four-layer 4-EX™ incorporates two isolating inner layers, a conductive outer layer and another conductive layer between two isolating inner layers, with the company maintaining that "the four-layer concept allows the manufacturer to select the appropriate wall thickness portions of individual layers to ensure optimum drum stability and performance". The thickness of the two conductive layers, it continues, can thus be reduced by 20 to 30 per cent, so requiring less conductive PE material and so cutting unit tare weight by up to 1 kg.

Likewise, the thickness of the inner layer, made of virgin PE material and which is in direct contact with the contents, can also be reduced, with the closeness of the product to the

conductive layer improving the protection from electrostatic charging and so increasing safety. To ensure charge transfer, a contact strip in the drum body connects the conductive layers to prevent electrostatic charging of the drum's inner wall, with all charges discharged through the grounded conductive outer layer. Optionally, a second contact strip in the inner PE layer further ensures the grounding of the contents, with the two strips spaced apart at 180° to ensure maximum charge dissipation. Compared with designs only employing contact strips in the bung area, which would intersect the wall at one spot on the drum body, the 4-EX, the company maintains, "provides significantly improved static charge dissipation" while "the superior design" of the unit "also provides mechanical strength with excellent cold drop performance". CENELEC-certified for MB products (DEKRA), the 4-EX is suitable for both IIA and MB products. Full UN approval, Mauser believes, should be obtained by the third quarter 2008.

Working in close collaboration with Korea's LG Chemical, Mauser has also devised a new 220 litre multi-layer drum incorporating a new permeation barrier based on nano-Perm™ nano silicate technology. Unlike the six-layer EVOH barrier technology introduced by Mauser in 2006, the nano-Perm concept can be readily incorporated in packagings produced using older machinery. Moreover, the new technology is imbued with particular flexibility in terms of customised applications, with the barrier performance able to be defined to meet individual customer demands. "After promising trials with one litre packagings, the test production of the 220 litre tighthead drum on Mauser machines was completed successfully in March 2008," the company reports, adding that the nano-Perm concept will in time "be implemented step by step for the whole range of Mauser plastics packagings to meet the demanding requirements" of customers.

New plant

Another plastics drum and composite IBC manufacturer that has been keeping itself very busy of late is Italy's Fustiplast. Having acquired Roth's German IBC manufacturing assets in November 2005, the company, explains Bernhard Hofmann of the German arm's sales department, has just opened its second IBC plant in the country. Occupying a 15,000 m² facility in Hückelhoven, approximately 30 km outside Düsseldorf, the new plant is slated to start turning out new Flubox IBCs this coming August. "The German market is growing well for us," Hofmann says, explaining that the bulk of the new plant's output will be consumed domestically while much of the remainder will

be destined for IBC users in the Benelux region. As well as adopting a new corporate identity and unveiling a revamped website (www.fustiplast.com), the company has also expanded its range of plastics drums with the launch of a new UN-approved 120 litre open head system for liquids and in the past few weeks has also been granted a patent for its new non-UN-approved Flubox aseptic liner system for the food and cosmetics sectors.

The installation of new machinery has enabled Werit to greatly improve the strength of its distinctive vertical-bar IBC cages. "It's a good product that we've made better," says sales manager Jürgen Heep, explaining that by employing cage bars with a new tubular profile, the company's IBCs can safely withstand extreme pressures of a magnitude that could cause a conventional lattice cage system to buckle and fail. Furthermore, the greatly enhanced dexterity borne of the new bar profiles means that each cage now only requires 16 vertical bars as opposed to the previous total of 20. Consequently, Heep continues, this results in reduced unit tare weights that ultimately translate into lower transport costs for customers. As well as this, the company has also developed a new IBC 'combi pallet', which consists of a sturdy steel platform combined with shock-resistant plastics corner feet that can withstand forklift-related incidents.

With enhanced product security in mind, France's Sotralentz has further tweaked its SLX line of composite IBCs through the addition of a new tamper-evident plastics butterfly valve, the moulded-in seal of which can be removed by a legitimate operative with a normal pair of pliers, explains commercial director Thomas Appels. Offering a complete range of UN-approved plastics jerrycans, drums and IBCs, the company expects to start producing IBCs at its new Polish plant near Warsaw by the end of the year, enabling Sotralentz to further serve the growing market for these packagings across central and eastern Europe. Although the company recently took the decision to exit the UK market, its IBCs are still available to users there through a licensing agreement with Ireland's Gem Plastics, which took over the company's erstwhile Peterlee plant at the start of 2007.

Smart IBC

One model of IBC that is certainly proving popular with chemical distributors in particular is the iCon from Promens, a heavy duty all-plastics systems combining an integral level sensor and the ConTracer™ remote monitoring system that enables a customer to not only see how much product is left in a particular unit but also where that unit is. Wim-Henk Stoppkotte, director sales and marketing, materials handling products Europe, explains that these unique fea-

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tures allow for enhanced fleet management and consumption diagnostics. But improved operational efficiency is just one of the many benefits offered by this smart IBC, with a cut-away demonstration model enabling visitors to peek beneath the unit's roto-moulded skin and see for themselves the iCon's internal spill containment provisions as well as the structure of its outer walls that combine insulation with considerable impact strength. Devoid of metal parts that might otherwise corrode, the iCon, Stoppkotte explains, has been designed to facilitate efficient cleaning while the inner receptacle can also be easily removed and replaced after a full five years of service.

In addition to the company's well-proven Multiway all-plastics unit, a medium-duty IBC

that "bridges the gap" between a heavy duty IBC, such as the iCon, and a standard blow-moulded composite IBC, the Promens stand also featured a new ATEX version of the popular food-grade Hopper system. As with the standard Hopper, the new unit features a 60° conical bottom to allow the complete discharging of solids and high viscosity liquids. However, through the use of conductive PE materials, the new system is safe to use in hazardous environments. Although the system is intended only to handle non-regulated product, Stoppkotte reveals that the company has so far received numerous requests for an appropriately approved dangerous goods variant and thus the matter of gaining UN accreditation for the new ATEX Hopper is something Promens "is looking into".

Yet more innovative plastics products were on show at the stand operated by Netherlands-headquartered CurTec, which earlier this year expanded its range of industrial packagings with the launch of a new wide-neck nestable keg design. Developed in partnership with the pharmaceutical industry, these 40-litre blow-moulded units are not only able to offer users significant space savings when empty and nested, but are also water- and water vapour-tight and incorporate special tamper-evident features. As well as this new keg, the company also had on display a new 90 litre drum; the UN-approved Kiuso drum, which, available in capacities of 20 litres and 30 litres, has been specially designed for ease of closing; and the latest additions to the Packo range of UN-approved small packagings, viz larger capacity units for product volumes of 1.5 litres, 1.8 litres, 2 litres and 2.5 litres.

Clever design

Elsewhere RPC, which last year acquired the blow-moulding business of France's Mob, also had on show some equally interesting small plastics packagings. Encompassing units with round, square-round and oblong footprints capable of handling a wide range of industrial chemicals in volumes of 5 litres up to 30 litres, the company's UN-approved range of packagings now includes the 10-litre Stackable Jerrycan produced in France by RPC Emballages. This particular system, explains general sales manager David Baker, sees the unit's carrying handle fitting snugly into the base of the unit stacked on top of it. Intended for manual stacking, the design of the system results in unprecedented stability and therefore enhanced safety during both transport and storage. While previously of limited availability outside of France, these units, he explains, "can now be offered across the RPC world".

To counter the problem of broken glass and spilt chemicals, Müller GmbH, the German arm of the Switzerland-based Müller Group, has expanded its range of steel drums, containers, modular process equipment components and product handling systems to include stainless steel bottles and jars with capacities ranging from 1.5 litres up to 25 litres. Available with full UN accreditation as required, these GMP-compliant systems can also be supplied with optional handles, bespoke markings and customised closures. Müller also took the opportunity afforded it by Interpack to air its new Mobile Container Lift Column. Likewise GMP-compliant, the system, the company asserts, boasts a compact footprint, a range of lift heights, easy maintenance and simple operation that facilitates precise unit positioning, being able to lift a 1,500 kg IBC or hopper bin



Mauser showed a range of new and familiar products

accurately above a tablet press or similar item of plant. By being part of the wider Müller Group, the German arm can readily provide customers with variously-sized plastics and fibre drums in addition to its own steel units, leading the company's Norbert Aigner to comment, "You can start production and you can finish production in Müller [products]."

New steel drum designs were very much on display at Silfa's stand. A well established Italian producer of UN-approved metal canisters, pails, hobbos and drums in capacities ranging from 250 ml to 60 litres, the company recently widened its product basket to include open head 220 litre conical drums for the transport of regulated solids and high density products. Being conical, these units are fully nestable and thus offer considerable space savings when empty. Mathys van Wagensveld, sales manager for Silfa's Dutch distributor VWM Apeldoorn, notes that these new drums consume "at least five times less space" than conventional cylindrical drums when nested, with their design also allowing 80 filled units to fit inside a single 20 foot ISO container.

Smart drums

Operating two production sites in Herford and Neustadt and selling to customers in 12 European countries through a network of local marketing partners, Germany's Sulo Emballagen has recently increased the dexterity of its large steel drums through the adoption of improved rolling swage designs, reveals project manager Wolfram Kneist. Additionally, with high steel prices stimulating greater unit reuse among customers, Sulo has responded to its customers' needs with the introduction of high performance, negative contour liners designed to fit exactly to the internal surface of the company's drums. Additionally, with demands for unit and product tracking increasing, the company has been busy developing and refining its portfolio of RFID-enabled steel drums, also developing a corresponding gate reader "big enough for a truck to go through".

While the market for steel drums may not be as rosy as some would no doubt like, Eric Winant, managing director of Belgium-based Metalfuts, reports that it is currently "better than in the past". Firstly, he explains, Grief's purchase of Blagden has helped spread business around its target European markets as customers, not wishing to be dependent on just one manufacturer, seek out other potential suppliers with which to trade. Secondly, with steel prices expected to undergo further hikes by September, customers are looking to acquire drums now so as to beat the anticipated price rise.

One company that was certainly enjoying good business at Interpack was Huber Packag-

ing Group, a producer of high quality UN-approved tinplate packagings, with marketing manager Bernhard Kürschner reporting that the company's TopExpand system, an unique automatic closing station for pails and hobbos that uses a pneumatic closing head to expand the closing element and the top end of the filled unit's body into the a closed clamping ring, was proving something of a hit with companies looking to enhance the efficiency of their filling processes (HCB April 2008, page 34).

Closed dispensing

Another system proving popular at Interpack, this time from for dispensing product, was the DrumQuik PRO from US-headquartered Colder Products. A simple-to-use yet cost-effective closed dispensing system combining an integrated and recyclable bung closure and dip-tube with a reusable quick disconnect coupler, the system, as well as featuring new colour-coded keys, is now available with an ISO G2 thread option for steel drums. "In response to demand from chemical packagers and their customers who have been using the DrumQuik PRO with plastics drums, we have expanded our product line to provide the same benefits to the millions of steel drum users," says Thomas Braun, business unit manager, chemical handling. "We're offering organisations that use steel drums, in fields from food packaging to chemical manufacturing, the chance to dramatically reduce waste, save money and improve safety."

Also offering enhanced product dispensing, IPI Global had on show its Advanced Dispense System (ADS) Coupler system, which it asserts is "the safest and most robust solution to dispense AdBlue from IBCs and drums fitted with the plastics CDS valve". Also capable of handling a wide range of hazardous chemicals, the ADS Coupler boasts a lifespan in excess of 10 years, with all components fully replaceable. The exclusive European and Asian distributor of Micro Matic drum valves, IPI Global also distributes heavy duty stainless steel containers manufactured by Germany's Schaefer Werke, with which it shared a stand and which also had on display specimens drawn from its range of UN-approved metal IBCs.

A producer of both metal and roto-moulded composite IBCs and accessories, Finncont, has widened its product offering to include a roto-moulded composite IBC-based mother and baby system, which IBC business director Kimmo Korhonen describes as proving "more and more popular", with customers able to benefit from improved filling cycles as a result of installing this fully bundled system.

Selling across Europe through growing network of sales agents and partners, the company has recently entered into a new arrangement with pack2pack that while giving Finncont access to the markets of Belgium, France and the Netherlands symbiotically enables pack2pack to bolster its existing portfolio of reconditioned packagings to include fully UN-approved stainless steel IBCs.

Low-cost IBCs

Another metal IBC manufacturer that has also recently broadened its geographical scope is France's BSI, which has recently brought online a new production facility in China. Enabling the company to better service chemical industry customers who have established operations in that country as well as indigenous packagings users, the move is also highly beneficial for customers in Europe as BSI, explains export assistant Evelyne Létard, is now able to offer a low-cost IBC design built to the same quality standards as in Europe but instead made at its new factory near Shanghai.

With two metal IBC production sites in its native Germany, UCON Containersysteme has built up an enviable reputation for quality, aided by a global sales network that in addition to Europe also encompasses sales agents in the US, Mexico, Japan, Singapore and Australia. Among the various examples of its output on show at Interpack were a perlite-insulated heated unit capable of temperatures of up to 150°C; a new paddle mixing system designed to fit all available Ucon models; and a new filling station designed to enable contamination-free product transfers from a metal IBC to a drum or similar packaging.

Also unveiling a new IBC discharging system for the filling of bags, sacks and drums at Interpack was UK-headquartered Matecon, a specialist manufacturer of metal IBCs for powders and solids that maintains a similarly extensive worldwide presence. Requiring no secondary packing equipment, the company's new Powder-Packer features the company's revolutionary VariStroke technology with cone valve discharge and self-learning software. Able to handle a broad spectrum of powders, the Powder-Packer has been designed to be easy to clean and, depending on pack size and the material handled, can typically fill a 25 kg sack in 30 to 90 seconds with an accuracy of between 50 g and 200 g.

In next month's Bulletin, part two of this exhibition review will look at what was on offer in terms of fibre drums, IBC rental services, big bags and assorted packaging accessories and handling equipment. In addition there will be a report on the European Flexible Intermediate Bulk Container Association's (EFIBCA) Open Meeting 2008, organised in tandem with the Interpack show.