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Meet us at the K
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round-up for Asia

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Tapestry:**
enriching colours

材料新闻
业界新闻

颜料与色母料:
色彩缤纷

applications (50-200 million containers/year) in mono/multi-layers and eliminated high speed bottle handling problems.

Also to be showcased for the first time in Europe will be *Wilmington's* Lumina structural foam injection moulder for pallets, collapsible shipping/storage bins, underground drainage and material handling applications. Improved features are a simplified nozzle/manifold system, independent sequence nozzle control, larger platens and electric extruder drives.

Top speed for PET preforms

A major development in PET preform moulding comes from *Sacmi* of Italy, which makes high-speed, continuous extrusion and compression moulding systems for bottle caps. Its new Preform Advanced Moulding (PAM) system is a 48-cavity prototype that compression moulds 27,000 preforms/hour. *Sacmi* says compression moulding offers advantages over injection moulding of preforms. Energy savings are said to be possible in subsequent stretch blow moulding because the preforms require less reheating due to different crystal orientation. Furthermore, the preforms can also be stretched at the bottom of the bottle due to the absence of an injection gate. Other benefits are greater weight consistency and more homogeneous material distribution.

Stretching higher outputs from SBMs

Another Italian company *Sipa* will roll out its newest rotary reheat stretch blow moulder (SBM) with higher output, reduced energy and lower maintenance. The SFR12 EVO is able to produce 24,000 bottles/hour, compared to the 21,600 for the previous model, and the chain pitch allows a wider range of neck finishes.

Nissei ASB will show its latest two-step SBM, which is the six-cavity NB-6N for 300 cc to 3 l bottles. It has a transfer device between the heating and blowing stations to prevent stopping/starting and achieve efficient movements for an output of 7,200 bottles/hour. To complement its reheat machine, is a new 16-cavity preform moulding machine that produces 6,000 preforms/hour for water and carbonated soft drink (CSD) bottles. It will also launch the single-stage ISB, a four-station 70DPHV4

that boasts a 3.5 second dry cycle, less than 4.5 seconds from the previous model. The 70 tonne model has up to 12 cavities for producing 30 cc to 7 l containers. The clamp system has been redesigned with a variable displacement hydraulic pump for 40% less power usage.

Lightweight bottle design breakthrough

Sidel will show its PET bottle designs like the NoBottle ultra-lightweight bottle and a 10 l 140 g family-size bottle as well as a PLA bottle for packaging edible oils. The 9.9 g 500 ml NoBottle, when compared to 13-16 g water bottles of the same size, weighs 25-40% less resulting in material savings. The bottle uses the Flex technology, which employs shape memory polymers so that the bottles spring back to the original shape when deformed.

Sidel will show its ultra-lightweight bottle design produced on a Universal SBO



The NoBottle will be produced at the booth on a SBO Universal 24xs machine, designed for 700 ml bottles for the still liquid and CSD single-serve packaging market, which represents 60% of growth worldwide. Complete lines ranging from 40,000-46,000 bottles/hour are offered in this range. Also on show will be the SBO 2XL Compact machine targeted at 5-10 l sized water and edible oil bottles.

The French company will also introduce what it says is the first automatic process regulation system for rotary blow moulding machines, for lightweight bottle production. Known as Equinox, it monitors and corrects bottle quality during production without off-line testing and it measures bottle weight and corrects deviations from the set weight by adjusting machine parameters without any downtime.

Advancing with electric blow moulders

Italian company *Techne* says its latest electric blow moulder allows for energy savings of 35%, compared to hydraulic

machines. The modular Advance comes in up to four shuttles, 4-40 cavities, electronic parison profiling, interchangeable extrusion platform and a six-layer configuration. Cost reductions are possible due to the Cambus wiring, an industrial PC Windows-based control, on-line technical assistance, remote production data retrieval and reduced maintenance. It also comes with *Techne's* Veltech, a patented cooling system capable of 15% higher speeds for aseptic, cosmetic and pharmaceutical bottle production. A prototype model, with Veltech and quick mould/colour change, will be shown producing 250 ml cosmetic bottles with an output of 8,658 pieces/hour.

Cutting it finely

A highlight at *Gillard's* booth will be a cutting system for metal-reinforced rubber and plastic profiles. This machine uses a circular blade to slice through the material to create a clean, square cut end, says the company. Digital AC brushless servomotors are used to control the cutting action with ± 0.1 mm length accuracy. A key feature, according to *Gillard*, is that both caterpillar infeed belts have their own AC servodrives that are synchronised to one encoder pulse per motor revolution. This represents a speed holding accuracy of better than 0.0005% says *Gillard*. Another feature is a gap detection system for punched or slotted metal-reinforced profiles. A fiberoptic sensor can detect gaps in the metal through the plastic or rubber surface coating of the profile.



Gillard's cutting machine for metal-reinforced plastics and rubber profiles

The other new machine on the stand will be the vertical coiling machine. Boasting a compact footprint, the machine features low tension coiling to remove the possibility of stretching or distortions. A fully automatic traverse mechanism is provided to ensure side-by-side layering from start to finish.