

Ramping up for 2010

This year will be better, say many that APN met at Chinaplas. The worst of the economic crisis seems to be over as Asia, led by China, drives the next wave of recovery. Some machinery makers share their strategies with Han Mui Ching

Last year 2009 was a challenging one. Orders fell while unemployment rose; many economies worldwide took a beating. In Asia, the effects of the downturn were dampened, thanks to the Chinese economy that remained largely buoyant. Business this year has started mostly on a positive note.

In the first quarter, Husky has done well so far, said Dinesh Budapanahalli, vice president of sales for global hot runners and tooling.

"All indications talking to customers show this year will be better than last year." Budapanahalli's words were echoed by most of the companies APN spoke to.

Headquartered in Canada, Husky has been building up its presence in emerging markets, particularly the BRIC economies represented by Brazil, Russia, India and China.

Husky set up its China plant, also its Asia Pacific headquarters, in 2004 to build low-tonnage injection moulding machines. Its scale was expanded last year to include manufacture of hot runners. Last year also saw Husky starting construction on a new 3,300 m² facility in Chennai, India which will house sales, customer support, manufacturing and sourcing capabilities. It will also pro-

vide hot runner and mould refurbishment services to customers in the region to cut lead times. Husky is also expanding its facilities in Sao Paolo, Brazil and opened a new office in Moscow, Russia.

A large proportion of Husky's customers in the developing markets are in the beverage business. Lower part cost, higher efficiency and lower energy usage are regular demands from bottlers. However, besides maximising profits, customers are increasingly showing concern for the environment and wanting to develop sustainable business models.

On display at Husky's Chinaplas booth was the HyPET 400 system featuring High Performance Package (HPP) capabilities. Equipped with a 96-cavity mould, the machine was producing 13.3g EcoBase preforms at a cycle time of 7.0 seconds. This works out to 49,000 parts every hour.

Husky's HyPET Recycled Flake (RF) system can produce food-grade preforms using up to 50% post-consumer recycled PET flakes. To achieve high-quality preforms like if 100% virgin resins were used, Husky incorporated in-line melt filtration to eliminate black specks and other contaminants, and a new extruder design which better process pellet and flake blends.

Topped with the new EcoBase proprietary preform design, each part can achieve up to 2.5% resin savings.

Budapanahalli said that the HPP system had received good response since its launch at the K show in 2007 because it was able to address some of the environmental criticisms faced by customers.

All round savings

"We had one of our best years in 2009," said Andreas Nydegger, general manager of Netstal China. He was largely referring to the Chinese market. He expects the market in US to pick up and some improvements in the Eurozone this year.

The main growth in China for Swiss-based Netstal comes from the beverage industry, which is growing very fast at about 20% each year, according to Nydegger. More filling plants are locating westwards in second and third-tier cities like Chongqing, Wuhan and Chengdu. Netstal supplies machines to the 5 or 6 large brands, both domestic and international ones, which dominate up to 80% of the market. Chinese consumers tend to trust big brands for quality and product safety, even more so after the health and food scares in recent years.

In other areas, Netstal is positioned to help



Husky's HyPET HPP system produces preforms containing up to 50% post-consumer PET flakes





customers who want to move up the technology ladder to produce, say, medical parts. The Elion 1200-530 fully-electric machine displayed at its Chinaplas booth was making PP syringe protectors. Even without external modification, this machine can achieve 10,000 cleanroom sterile standards. The encapsulated electric motors are water-cooled, which cuts down not only radiation but also emission of fine particles, resulting in lower operating costs if placed in a cleanroom.

Another allure of the Elion range is its energy efficiency. Its "recuperation system" stores braking energy during the moulding process, which is then channelled back to the power circuit for other parts of the machine. Netstal says that if this principle is efficiently applied, it can save up to 70% energy compared with conventional drive systems. Additionally, a precise closed loop control of the moulding process improves accuracy and lessens rejects.

"Our goal is to cut energy consumption and waste material," said Nydegger. "Our machines are highly efficient and very precise so in the end, the customer saves money."

Electric dreams

Our customers want to save energy and still maintain high speed and precision, Haitian's executive director and chief strategy office Helmar Franz said.

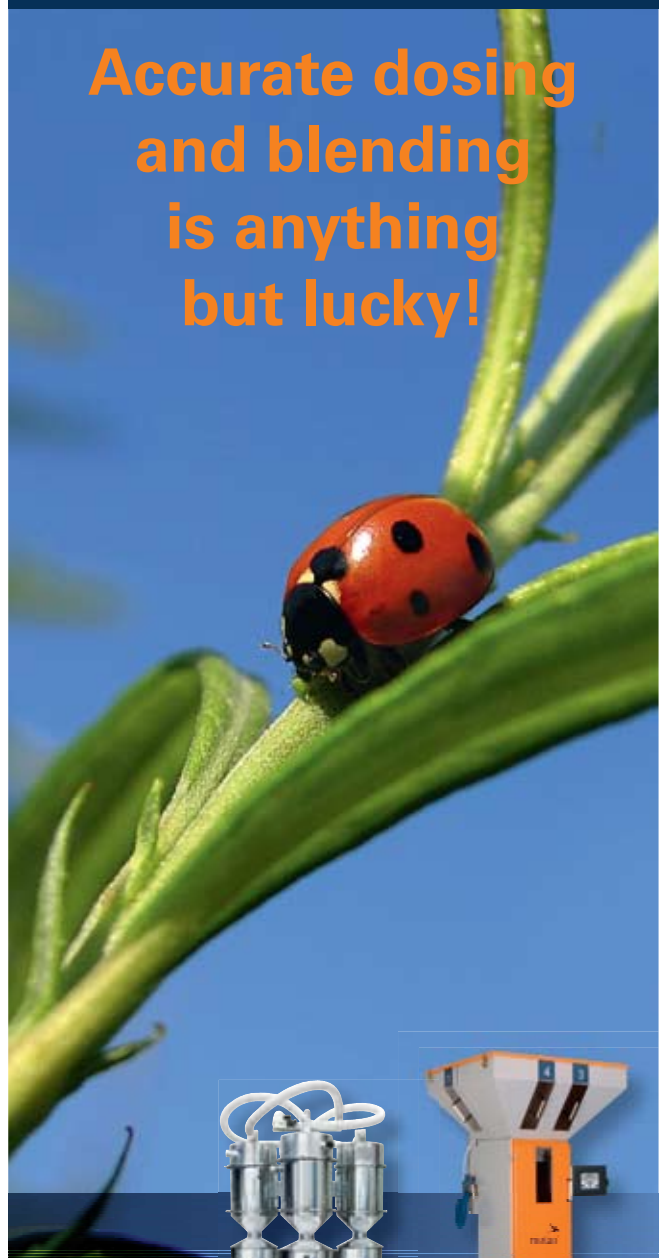
Despite the poor situation last year, Haitian sold about 18,000 machines, turning

Netstal's Elion fully-electric machine saves energy and maintains accuracy

Haitian will unveil the Zhafir Mercury injection moulding machine at K



Accurate dosing and blending is anything but lucky!



Motan dosing and blending systems

Gravimetric and volumetric dosing and blending units offering highest levels of accuracy and repeatability.

— your partner for materials handling — worldwide —

BlendingLine

motan-colortronic pte ltd
Singapore
Phone : +65 6873 7666
Fax : +65 6873 7555
info@motan-colortronic.com.sg

Thailand
Phone : +66 2 717 1088
Fax : +66 2 717 1080
info@motan-colortronic.co.th

Visit motan-colortronic's booth at Interplas, Bangkok 24-27 June 2010 BITEC, Thailand Booth No. B13, Hall 101



www.motan-colortronic.com

Injection Moulding



Haitian executive director and CSO stands by Zhafir's Venus machine

in RMB3.86 bil (US\$565 mil) in sales. These figures represent a growth of 4.5% from 2008, thanks to the second half of 2009 which showed better turnover and profits.

Of these, 250 machines are fully-electric presses, a number Franz said was double that sold in 2008. He is confident that orders this year will double again since sales for the first quarter is already 60% of the whole of 2009. Haitian aims to produce around 500 fully electric machines this year, with a spare capacity to produce 500 more.

A possibility for the heightened demand could be the increasing use of electric machines to produce packaging. Haitian's electric machines — ranging from 40 to 410 tonnes — are usually sourced for precise mechanical parts like connectors. Franz said he did not expect such strong demand from the packaging sector but the use of electric machines seems to be spreading.

Price is an important consideration. Haitian machines cost less than their Japanese equivalents and their quality can meet the expectations of customers.

As the world's largest injection moulding maker, Haitian International set up a new subsidiary Zhafir in 2007 to differentiate brandings so as to cater to different customer segments and their requirements. Positioned as Haitian's "premium brand", Zhafir features high injection speeds, short cycle times and high part accuracy.

Since the launch of the Zhafir Venus series in 2008, 350 machines have left the factories in Ningbo, China and Ebermannsdorf, Germany. Response has been positive; towards the end of 2009, electronics contract manufacturer Flextronics ordered 20 VE4100 (410 tonnes) units, Haitian announced.

Come K this year, Zhafir will officially unveil its latest Mercury series. Franz said the Mercury series is a brand new concept in injection moulding, utilising up to 10 principles which have not been used as such before in injection moulding machines.

For example, instead of the normally round tie bars connecting the two fixed platens of the clamping unit, the Mercury machine would have a kind of cage with flat side sheets taking the load. With the removal of tie bars, the mould area becomes larger compared to conventional machines. Since the machines are narrower, more can be fitted onto the factory floor. Modifications are also made to the injection units so that the injection speed and acceleration is increased, less energy is used and resin plasticisation is smoother.

Zhafir is a strong personal story for Franz. The name Zhafir is a combination of the Haitian owners, the Zhangs and Franz, and the company is helmed by the second generation in China and Germany. The design and colour of the logo are also family efforts.

Seeking new pastures

Japan's Nissei showed off two machines at Chinaplas.

The 110-tonne NEX 110-6EH was producing 3-inch PC light-guide plates, each with a thickness of just 0.32 mm. The all-electric injection moulding machine could reach a top injection speed of 1,000 mm/sec, achieving a fast cycle time of 13.8 seconds.

Nissei shows off fast-cycle times and high accuracy on its NEX 110-6EH machine



Nissei president Hozumi Yoda said that the machine on display has been sold to a Chinese company in Guangdong producing mobile phone parts. The customer is testing out the machine and Yoda expects to sell more units. This machine is suitable for making mobile computer, netbooks and mobile phone parts. Some South Korean and Chinese customers have indicated interest.

Also on display was the TH40E5VE electric vertical machine which was moulding LCP microphone connectors onto a metal strip. The speed (cycle time of 4.6 seconds per shot) and precision of this model have improved from previous models.

Last year, Nissei sold 450 machines in China, electric and hydraulic models of similar proportions. Yoda is optimistic that this year will be better. Besides the electrical and electronics industry, Nissei is banking on the rise of China's automotive industry as well as an underdeveloped sector in China — hybrid cars.

Hybrid cars are gaining popularity and parts for such cars usually use more plastics. Japanese auto makers are forerunners in hybrids and Nissei has worked with most of them, including Toyota and Honda. On the other hand, American companies such as Ford and GM, which have large assembly plants in China, are escalating research and production in this area. Yoda believes Nissei's experience and expertise in hybrid cars will give it an edge over its competitors and win new customers.

Yoda revealed that Chinese car maker BYD too, plans to produce electric/hybrid cars. Nissei's experience will assist the necessary technology and know-how to be transferred to China. The automotive industry will be one of Nissei's key drives this year.