Press release
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At the Fakuma 2012, all series from Sumitomo (SHI) Demag displayed their flexibility and functions in highly demanding, complete solutions

Experiencing production efficiency and shaping it for the future

More than ever before, it is precision, availability, production performance and energy efficiency that are the dominating criteria for optimum production facilities. As a result, Sumitomo (SHI) Demag Plastics Machinery GmbH based in Schwaig near Nuremberg, has for years now consistently oriented its machine series according to precisely these customer requirements: The Japanese/German company is attending the 22nd Fakuma, the International Exhibition for Plastics Processing in Friedrichshafen, once again and will be emphasising its pioneering role in the area of production efficiency with high-quality exhibits. From 16 to 20 October 2012, visitors attending stand 1105 in Hall B1 will be experiencing the premiere of the new, fully electric IntElect multi series, as well as the Systec hydraulic machine series, with an innovative IML-IMD combination as well as the hybrid, high-speed El-Exis SP machine with its new side entry.

Sumitomo (SHI) Demag Plastics Machinery GmbH will be presenting its current portfolio under the motto of "Ready for the future". Production efficiency takes a central role. "In our machine development, this topic not only takes priority but also enjoys a long tradition,"

emphasises marketing boss, Bernd Tröger. "With this in mind, we supply a holistic concept in each machine series by making sure that all components are optimally matched to one another in terms of energy consumption, dynamic properties, output and availability. It goes without saying that we intend continuously to adapt this approach to new processing requirements and new technological developments in the engineering business." This year's exhibits clearly show that the building blocks from the activePlus programme are able actively to influence the production efficiency of the injection moulding machine. Examples of this include the switching backflow lock, activeLock, for achieving the highest levels of process consistency in precision production with fully electric machines as well as activeFlowBalance, a new development for compensating the pressure conditions within the cavity or between cavities. This function actively intervenes in the sensitive process of changing over from injection pressure to final intensified pressure.

IntElect: multi expansion stage provides fully electrical multi-component injection moulding

Without doubt, the highlights of the show include the new multi expansion stage of the IntElect series. For the first time, an IntElect multi 350-1700h/250v (3,500 kN) demonstrates that the performance features of fully electric drives such as the highest precision and maximum process consistency can be applied in full to multi-component injection moulding. In line with the specific requirements of this technology, multi machines have an extended ejector travel and can be equipped with a turntable that has its motor drive integrated into the new, high-performance NC5 plus controller. To allow the larger moulds that are typically used in multi-

component processes to be employed without problems, the multi series is available with the corresponding wide platen versions. The first step is being taken by the IntElect multi 350 with a spar width of 830x830 mm, and will be followed next by the IntElect multi 220 (2,200 kN). The core pull units operate with activeDrive, which is a pump controlled electrohydraulically and by flow rate. The dynamic performance adaptation this involves in all phases of the injection moulding cycle ensures optimum efficiency and minimum losses – above all under part load and when operating without load. With IntElect multi, Sumitomo (SHI) Demag Plastics Machinery GmbH is bringing multi-component injection moulding to a new level thanks to innovative and sustainable technology that offers scope for future expansion.

Systec: Operable display with decor and function foil all in one step

Sumitomo (SHI) Demag is showing off a real technological quantum leap with its combined IML-IMD application. This combines decoration and function in the high-end segment in a unique way. The innovative combination of IML and IMD processes reduces the task of producing displays with integrated controls or button surfaces to a single production step. In addition, it obviates the need to use glass which is both fragile and energy-intensive to produce. This is made possible by transparent, conductive PolyTC® foils from PolyIC GmbH & Co. KG, Fürth, for capacitive control keys and adjusters.

A production cell based on a Systec 210-430 (2,100 kN) produces display frames made from PMMA that are only 2 mm thick. These have an IMD decoration foil on the front and a function foil on the back which is

incorporated using the IML process. The feed unit from LEONHARD KURZ Stiftung & Co. KG, Fürth, puts in the IMD foil, and is mounted above the mould installation space. The function foil is provided by a 6-axis robot and is fixed in the mould by vacuum with precise tolerance. This is so that the full range of functions of the display can be guaranteed. As a third element, the frame carries the contacts required for the electrical connection. The production unit is rounded off by extensive finishing systems. This exhibit impressively underlines the expertise of Sumitomo (SHI) Demag as an innovative vendor of complete solutions.

El-Exis SP: High-speed machine benefits from a new speed side-entry unit with IML

For the first time, Sumitomo (SHI) Demag is presenting itself as a full-range supplier in the IML production area. On the stand of its partner of long standing, Sepro Robotique, La Roche-sur-Yon/France, a high-speed El-Exis SP 250-1600 machine with a double mould from Colomb, Oyonnax/France, is producing 1 l buckets with IML labels in less than 5 seconds. The highlight of this application is the speed side-entry attached to the side, which has been developed jointly by Sepro Robotique and the specialist for IML automation, Machines Pagès, Foncine Le Haut/France.

The side-entry device can be used with machines with up to 5,000 kN closing force, and achieves travel distances up to 2200 mm. The Visual 3 controller from Sepro communicates with the NC5 plus controller of the injection moulding machine in real time during production. As a result, the optimum procedure is guaranteed at all times, and unproductive times are reduced to an absolute minimum. With this exhibit,

Sumitomo (SHI) Demag is once again demonstrating the effectiveness of its cooperative ventures. Ideas with prospects for future applications are developed jointly with expert partners in line with industry requirements, and are then marketed worldwide.

This year's impressive show presentation will be rounded off with a compact production unit based on an IntElect 50-45. This will be demonstrating a high-tech application from the field of medical technology.
Furthermore, an IntElect 100 on stand 1205 (gwk Gesellschaft Wärme Kältetechnik mbH, Kierspe) in Hall B1 will be producing a precision lens component.

NC5 plus with additional features

The NC5 controller introduced in time for the Fakuma 2011 is installed on all newly delivered machines as standard. It assists the processing company by providing a very broad bandwidth of functions. This unique controller is supplemented by some new applications and options. It is therefore only logical that it will set a trend towards efficient production at the trade show.

Customer service: with a new organisation

Ever since Dipl.-Ing. (FH) Reinhold Ganzer took over management of worldwide customer service in November 2011, the structure of this area of the company, which is so important for customers, has been experiencing clearly apparent improvements in terms of rapidity, flexibility and the range of services offered. As a result, a separate area of the show stand will be devoted to presenting the specific changes and the new advantages for customers.

Customer service of Sumitomo (SHI) Demag offers, amongst other services, a range of retrofit solutions in order to optimise existing machines. The smartDrive energy-saving retrofit makes it possible to increase the energy efficiency of hydraulic injection moulding machines by retrofitting them with a variable-speed pump drive. This means efficiency levels and energy savings of up to 40 per cent can be achieved.
In addition to this, the new EnergyCheck service offers the possibility of exactly measuring the energy consumption of existing hydraulic injection moulding machines and indicating potential savings by means of corresponding retrofits.
As the latest retrofit available, customer service is offering a controller upgrade from NC5 to NC5 plus. This means the additional features of the NC5 plus controllers can now also be used on existing NC5 machines.

Sumitomo (SHI) Demag Plastics Machinery GmbH
Sumitomo (SHI) Demag has lastingly shaped the plastics industry from the very beginning. Being a specialist for injection moulding machines for polymer processing, Sumitomo (SHI) Demag and its Japanese parent company are among the leading companies in this sector globally. The Japanese-German company was formed in the spring of 2008 by merging the injection moulding activities of Sumitomo Heavy Industries (SHI) and those of Demag Plastics Group.

The global development and production network of Sumitomo Heavy Industries and Sumitomo (SHI) Demag consists of five plants in Japan, Germany and China with more than 3,000 employees. The product portfolio encompasses all-electric, hydraulic and hybrid

injection moulding machines with clamping forces of between 180 and 20,000 kN. With over 100,000 machines installed, Sumitomo (SHI) Demag is present in all important markets throughout the world.

With more than 5,000 machines sold each year, the Plastics Machinery Business of Sumitomo Heavy Industries counts as one of the largest Global manufacturer of injection moulding machines.

The main Sumitomo plant in Chiba produces machines with low and medium clamping forces. Around 95 % of all machines supplied by Japan have an all-electric drive.

The main Demag facility in Schwaig/Germany focuses on the hydraulic Systec and the hybrid high performance, high-speed El-Exis machines. Recognising the increasing importance of electric drive technology for injection moulding machines, Sumitomo (SHI) Demag has expanded the former Demag factory in Wiehe/Germany into an international centre of competence for electric machines. Thanks to the new production capacities, Wiehe now supplies all electric injection moulding machines worldwide with its IntElect series with clamping forces up to 4,500 kN and also the hydraulic Systec series with clamping forces of up to 1,200 kN.

Sumitomo (SHI) Demag continues to operate the former Demag plant in Ningbo/China which has been active since 1998. Since 2007 the subsidiary located there, Demag Plastics Machinery (Ningbo) Co., Ltd, had its own, newly built plant and after reaching full capacity, moved to a larger factory with a production

area of 11,000 sqm. Injection moulding machines from the Systec C product line with clamping forces of between 500 and 10,000 kN are produced here for Asian markets.

In addition to injection moulding machines, Sumitomo (SHI) Demag offers customised and standardised systems for the automated handling of moulded parts, technical solutions for special applications in process engineering, tailor-made service concepts and various forms of financing for investments in injection moulding machines.

With its seamless sales and service network of subsidiaries and representations, Sumitomo (SHI) Demag is present in all major industrial markets.

www.sumitomo-shi-demag.eu

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<IntElect_50_45>

The fully electric IntElect 50 will be at the Fakuma 2012. Installed in a fully automatic unit with clean-room equipment, it will provide an impressive demonstration of producing medical components.

Photo: Sumitomo (SHI) Demag

<El-Exis_SP_450>

An El-Exis SP 250, in this case a model with a 4,500 kN closing force, will be at the trade show. It will be demonstrating the capabilities of a high-speed production unit for manufacturing buckets, associated with a new speed side-entry from Sepro Robotique.

Photo: Sumitomo (SHI) Demag