Press release
18 April 2012

Sumitomo (SHI) Demag presents a complete series of machines for the Chinese market

Systec C modular injection moulding machine phases out the Dragon series

The new Systec C series from Demag Plastics Machinery (Ningbo) Co., Ltd. has been designed for a wide range of applications in all industrial sectors. With the launch of the new Systec 50 C to Systec 120 C machines with closing forces between 500 and 1,200 kN, the Chinese subsidiary of the Japanese/German injection moulding machine manufacturer Sumitomo (SHI) Demag is phasing out its Dragon series. As a result, the fully regulated, hydraulic all-purpose machine series is now available in Asian markets with 12 sizes and a comprehensive range of modular features in the closing force range from 500 to 10,000 kN.

As in the past, hydraulically driven injection moulding machines occupy the lion's share of the world market for injection moulding machines. For this main market, Demag Plastics Machinery (Ningbo) Co., Ltd. offers its multifunction Systec C machine from 500 to 10,000 kN closing force with a hydraulic closing unit – from 500 to 1,200 kN with a fully hydraulic knuckle-joint closing system and from 1,300 to 10,000 kN with a hydrodynamic knuckle-joint closing system. Four sizes of injection units are available for each closing force category.

Linear guides for the moving platen are used in all Systec C machines to ensure low friction resistance and very smooth running. The double pump concept of the new machine permits parallel movements, and thus greater dynamic performance with shorter cycle times. "The hydraulic machines are characterised by their high level of production efficiency and, last but not least, a good price/performance ratio," emphasises Markus Stadler, the head of Technology at Demag Ningbo, "we have implemented numerous building blocks from our production efficiency catalogue into the Systec C series, and these will offer our customers extremely economical production."

The Systec C – like the European machines from Sumitomo (SHI) Demag – is equipped with the well known NC5 controller. In addition, it has all the usual interfaces, e.g. for automation

technology. Also, the hole patterns of the die clamping plates are oriented on tried-and-tested European standards.

Standard equipment and additional tools for high production efficiency

Economy and efficiency are at the heart of the Systec C series. For example, even the standard equipment includes drives specially developed for injection moulding, high efficiency and dynamic properties. The speed-controlled activeDrive for the DFEE pump adjusts the machine's power dynamically during all phases of the injection moulding cycle. In this way, activeDrive provides optimum efficiency and minimum losses – above all under part load and when operating without load. The combination of a variable-speed electric motor and a highly dynamic control pump permits savings of between 10 and 50% compared to a standard hydraulic system.

On the Systec C, insulating sleeves for the cylinder can reduce heat losses in the plasticisation unit. This improves energy efficiency and shortens the heating-up times of the cylinder. The energy consumption of the overall machine can be reduced by up to 6% as a result of this specific equipment.

Last but not least, the knuckle-joint versions allow an electric metering drive to be used. Firstly, this achieves higher performance with a greater efficiency than hydraulic plasticisation motors and, secondly, it permits plasticisation in parallel with the cooling time and also in parallel with the die opening movement. In this way, the electric dosing motor reduces energy consumption by up to 8% and offers potential for reducing the cycle time.

activeCool&Clean: Cooling and filtering system for long service lives

The active activeCool+Clean filter and oil cooling concept extends the service life of the oil, ensures more precise temperature control, provides for lower wear and lower noise levels, extends the service intervals and thus reduces maintenance costs.

activeQ: Active die protection for the knuckle-joint models

The highly sensitive activeQ die protection system on machines with a knuckle-joint closing unit effectively protects dies against wear or damage thanks to the interplay between comprehensive monitoring of the travel forces during the closing movement and the high reaction speed of the machine controller.

Demag Plastics Machinery (Ningbo) and Sumitomo (SHI) Demag in profile

Demag Plastics Machinery (Ningbo) Co., Ltd., Ningbo/China has been manufacturing high-performance injection moulding machines for the Chinese and other Asian markets since 1998. The former Demag site has been located in its own, newly built plant since 2007, after having relocated to a larger factory premises with 11,000 m² production area after achieving complete capacity utilisation. The range of injection moulding machines will in future consist of the Systec C series with 500 to 10,000 kN closing force for Asian markets.

Sumitomo (SHI) Demag Plastics Machinery GmbH, Schwaig/Germany, is one of the world's largest manufacturers of injection moulding machines for plastic processing. The Japanese/German company was formed in early 2008 by the merger of the injection moulding machine activities of Sumitomo Heavy Industries (SHI) and the Demag Plastics Group.

The global development and production network of Sumitomo Heavy Industries and Sumitomo (SHI) Demag comprises four plants in Japan, Germany and China, employing more than 3,000 people. The product range includes fully electric, hydraulic and hybrid-drive injection moulding machines in the closing force range between 180 and 20,000 kN. With over 100,000 installed machines, Sumitomo (SHI) Demag is present in all important markets in the world.

Selling more than 5,000 machines every year, Sumitomo Heavy Industries with its plastics machine arm is regarded as one of the largest global manufacturers of injection moulding machines.

The Sumitomo headquarters in Chiba, Japan, manufacturers machines with small and medium closing forces. About 95% of all machines delivered have a fully electric drive concept.

The Demag headquarters in Schwaig/Germany focuses on manufacturing Systec machines as well as El-Exis hybrid high-performance and high-speed machines. In line with the increasing importance of electric drive technology for injection moulding machines, Sumitomo (SHI) Demag has expanded the former Demag plant in Wiehe/Germany into a global centre of competence for electric machines. Thanks to the production capacities created, Wiehe currently supplies electric injection moulding machines with up to 4,500 kN closing force in the IntElect series, as well as hydraulic machines in the Systec series with up to 1,200 kN closing force for the international market.
In addition to injection moulding machines, Sumitomo (SHI) Demag offers systems for individual customers and standardised systems for automating the moulded part handling, proc-

ess engineering solutions for special applications, tailor-made services and service concepts as well as offers of financing the investment in injection moulding machines.

With its comprehensive sales and service network comprising subsidiaries and agencies, Sumitomo (SHI) Demag is present in all important industrial markets.

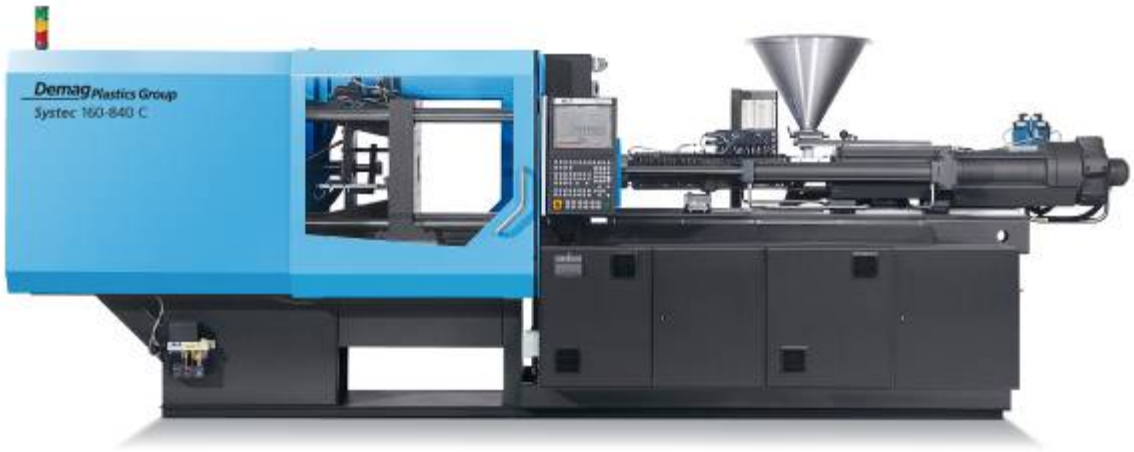
www.sumitomo-shi-demag.eu

Demag Plastics Machinery (Ningbo) Co., Ltd.
Chinaplas, 18-21 April 2012
Shanghai, Stand E2J41

****

Contact
Stephan Greif, Chief Executive Officer
Demag Plastics Machinery (Ningbo) Co., Ltd
Tel. +86 574 8618 1500
Fax +86 574 8618 1518
E-mail: Stephan.Greif@dpg.com

Stefanie Lauterbach, Marketing
Sumitomo (SHI) Demag Plastics Machinery GmbH
Tel. +49 911 5061-2915
Fax +49 911 5061-750
E-mail: Stefanie.Lauterbach@dpg.com



The energy-efficient hydraulic Systec C injection moulding machines produced by Demag Plastics Machinery (Ningbo) – in this case a Systec 160-840 C
Photo: Demag Plastics Machinery (Ningbo)