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USER REPORT

MESTO Spritzenfabrik Ernst Stockburger GmbH, Germany

MESTO saves space and energy with injection molding machines from WITTMANN BATTENFELD

The sprayer manufacturer MESTO based in Freiberg / Neckar relies on injection molding machines from the WITTMANN Group to modernize its machinery. Apart from reliability and quality of service, the most attractive features of WITTMANN BATTENFELD machines are their low energy consumption and compactness.

MESTO, a family-owned company in the third generation, was established in 1919 by Karl and Ernst Stockburger as a metal workshop. Its initial business consisted of repairs and locksmith work. In 1925, it started its production of spraying equipment. Today, the company with a workforce of 120 employees ranks among the leading manufacturers worldwide in the spraying equipment sector, making one million sprayers annually on 9,000 m² of production floor.

In the 1970s, MESTO started the production of plastic parts for its appliances, which was further extended with the construction of a new production hall in 2012. Its high vertical range of manufacture is one of the company's vital success factors. Plastics injection molding, metalworking and assembly are all located in-house, to enable the production of steel and stainless steel containers as well as all necessary plastic parts, including appliances completely made of plastic.

The appliances from MESTO stand out in particular by features which give the customers added value. These are, for example, the ergonomic design of the sprayers for fatigue-free working, long service life of the appliances due to their robustness, as well as guaranteed availability of spare parts for 20 years. The products are marketed partly as catalog goods and partly developed and manufactured for OEMs. Typical customer segments are industry and tradespeople, home and garden, the food industry, fruit growing and viticulture, agriculture and forestry, the automotive sector and cleaning services. A product line of special interest to MESTO is sprayers for disease control, and here in particular for fighting malaria. MESTO's range includes an appliance certified by the WHO which was

specially developed for this purpose. With this appliance, MESTO is one of the mere handful of manufacturers worldwide which cater to this segment.

The aspect of sustainability is also given a high priority at MESTO. For instance, recycled material is used for producing non-pressurized parts. A photovoltaic system is currently being installed, and the waste heat from the injection molding machines is used for heating. Élise Sellmayr, Manager of Production Technology and Process Optimization at MESTO, points out that a significant amount of energy savings has also been achieved by replacing old injection molding machines with new ones. Élise Sellmayr explains: “The decision to replace the first old machine models was made in order to improve quality standards and reliability. After a substantial reduction of electricity consumption was measured with the new equipment, this aspect was another decisive motive for replacing more old machines. In this way, electricity consumption has been reduced by 30% since 2017 by exchanging eight of a total of 16 existing machines for new ones from WITTMANN BATTENFELD.”

Currently, a total of 15 injection molding machines are operating at MESTO, ranging from 250 to 5,000 kN in clamping force, 11 of which have come from WITTMANN BATTENFELD. The machines delivered since 2017 are models from the servo-hydraulic SmartPower series with clamping forces from 600 to 3,500 kN, as well as one MacroPower with 5,000 kN clamping force. The machines from the SmartPower series stand out by their high level of stability, energy efficiency and compactness. Most of the machines come equipped with linear robots from WITTMANN. One SmartPower 350 is designed as an Insider cell, which means that the W831 robot from WITTMANN, a conveyor belt and the protective housing are all integrated in the production cell – a solution greatly appreciated at MESTO due to the amount of space saved by the system’s compactness, and one which will also be considered for the acquisition of future production cells.

On the most recently delivered SmartPower 350, an automation system designed by WITTMANN BATTENFELD Germany based in Nuremberg has been implemented, which includes a separation and feeding device for insert parts and a stacking unit.

An additional SmartPower 180 equipped with a robot and automation will be delivered in late summer this year. The object of this project is to feed various metal inserts to the machine for overmolding. In addition to the machines with automation, MESTO has also ordered a printing station for plastic parts from WITTMANN BATTENFELD Germany.

Apart from their high energy efficiency, the injection molding machines are appreciated at MESTO primarily for their compactness and reliability. The possibility to obtain machines, automation and auxiliaries all from a single source from WITTMANN is also becoming more and more important for MESTO. Johannes

Stuber, Production Manager at MESTO, particularly appreciates the good cooperation right from the concept planning stage. Johannes Stuber comments: “What gives WITTMANN BATTENFELD a competitive edge is above all its excellent service. In combination with its energy-efficient, compact, complete solutions, this is a decisive factor for us in the joint implementation of any projects.”



Fig. 1: (from the left:) Michael Wittmann, WITTMANN BATTENFELD Sales, Johannes Stuber, Production Manager at MESTO, Élise Sellmayr, Manager of Production Technology and Process Optimization at MESTO, Simon Heber, Process Engineer for Plastics and Rubber Technology at MESTO, and Domenico Scavello, WITTMANN BATTENFELD Sales, in front of the SmartPower 350/2250



Fig. 2: MESTO production floor



Fig 3: Bottom parts of 3-bar sprayers



Fig. 4: Finished 3-bar pressurized sprayers (Photo: MESTO)



Fig. 5: 6-bar high-pressure sprayers (Photo: MESTO)

The WITTMANN Group

The WITTMANN Group is a globally leading manufacturer of injection molding machines, robots and auxiliary equipment for processing a great variety of plasticizable materials – both plastic and non-plastic. The group of companies has its headquarters in Vienna, Austria and consists of two main divisions: WITTMANN BATTENFELD and WITTMANN. Following the principles of environmental protection, conservation of resources and circular economy, the WITTMANN Group engages in state-of-the-art process technology for maximum energy efficiency in injection molding, and in processing standard materials and materials with a high content of recyclates and renewable raw materials. The products of the WITTMANN Group are designed for horizontal and vertical integration into a Smart Factory and can be interlinked to form an intelligent production cell.

The companies of the group jointly operate ten production plants in six countries, and the additional sales companies at their 36 different locations are present in all major industrial markets around the world.

WITTMANN BATTENFELD pursues the continued strengthening of its market position as a manufacturer of injection molding machines and supplier of comprehensive modern machine technology in modular design. The product range of WITTMANN includes robots and automation systems, material handling systems, dryers, gravimetric and volumetric blenders, granulators, temperature controllers and chillers. The combination of the individual areas under the umbrella of the WITTMANN Group enables perfect integration – to the advantage of injection molding processors with an increasing demand for seamless interlocking of processing machines, automation and auxiliaries.

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