

May 2016, Kottlingbrunn/Austria

USER REPORT

Hugo Ackermann GmbH & Co. KG, Kierspe, Germany

Ackermann – successful with innovative, energy-efficient injection molding technology from WITTMANN BATTENFELD

Ackermann, based in Kierspe, North Rhine-Westphalia, Germany, has supplied the mechanical engineering industry with high-quality plastic products for more than 60 years. From the very beginning, these products were manufactured on BATTENFELD injection molding machines. In March this year, an EcoPower 300 with an insider solution was added to the company's range of machinery.

Ackermann, a successful medium-sized, family-owned company in the 3rd generation, was founded by Hugo Ackermann as a tool-making shop in 1938. For the first thermoplastics processing machine made by BATTENFELD in Meinerzhagen, North Rhine-Westphalia in 1949, Ackermann supplied the mold. In 1954, the company acquired its first injection molding machine for thermoplastics processing, supplied by BATTENFELD.

Over the following years, Ackermann continuously extended and modernized its range of machinery. Today, Ackermann has 15 injection molding machines installed with clamping forces ranging from 350 to 5,000 kN, of which 14 have come from WITTMANN BATTENFELD. With 23 employees, Ackermann manufactures in two shifts mainly products in small and medium-sized batches for general mechanical engineering, the pump industry and electrical engineering. The company has made a name for itself in the industry, for example with the development of lost core technology to realize complex internal cavities. For this purpose, Ackermann casts melting cores consisting of an alloy with a low melting point and surrounds them with plastic by insert molding. Due to the special attributes of the plastic material used, the metal cores are subsequently melted by induction instead of heat – in contrast to the lost core technology used in the automotive industry.

To make high-quality parts with internal cavities such as handles or telephone receivers, the company has been using the AIRMOULD® internal gas pressure

process from WITTMANN BATTENFELD for many years. Multi-component technology from WITTMANN BATTENFELD is also applied by Ackermann.

The company's products are technical plastic parts to customers' specifications such as housing components, small parts for pumps and fixtures, and fluid technology parts, primarily made of polycarbonate, polyamide, POM and PBT. Fiberglass- and carbon fiber-reinforced materials are also used.

In 2009, WITTMANN BATTENFELD brought its first machine from the new *PowerSeries* to market, the all-electric *EcoPower*. Ackermann was the first customer to buy it. The high precision of these machines and their extremely low energy consumption impressed Christoph Ackermann, the company's Managing Director and CEO, as well as his brother Matthias Ackermann, who is responsible for product quality. Christoph Ackermann comments: "From the *EcoPower*, we get products with excellent surface quality, and we have hardly any start-up scrap. Compared to our older machines, the *EcoPower* consumes just one half of the energy".

Positive experience with the first *EcoPower* machines prompted Ackermann to install an additional machine of this type in 2014, this time with 1,800 kN clamping force. And in March of this year, an *EcoPower* 300/2100 with insider solution was commissioned at Ackermann. In the insider solution, the robot, transport conveyor belt and other peripherals for upstream and downstream processing are integrated in the injection molding machine. According to Christoph Ackermann, the *EcoPower* Insider is easy to operate, requires little space and looks good. Peter Kroczeck, Ackermann's Production Manager, is also more than satisfied with the new *EcoPower* and praises its excellent performance, its low energy consumption and the low noise level of all *EcoPower* models.

Apart from the machines and process technology supplied by WITTMANN BATTENFELD, ACKERMANN also appreciates the robots and peripherals from the WITTMANN Group. So WITTMANN robots have not only been purchased for the newly installed machines, but also to upgrade some of the older ones.

For Christoph Ackermann, the package as a whole is vital in making investment decisions: "We want a modern, energy-efficient machine with user-friendly robot technology from a single source." But also service and closeness to the supplier are decisive purchasing criteria for Christoph Ackermann. The many decades of business relations between Ackermann and WITTMANN BATTENFELD are convincing evidence that Ackermann has found in WITTMANN BATTENFELD a partner which meets the company's requirements in every respect.



Fig. 1: Ackermann production hall in Kierspe



Fig. 2: from the left: Matthias Ackermann, Quality Manager at Ackermann, Christoph Ackermann, the company's Managing Director and CEO, Frank Höher, Salesman WITTMANN BATTENFELD and Peter Kroczek, Ackermann Production Manager in front of the new *EcoPower 300* with insider solution

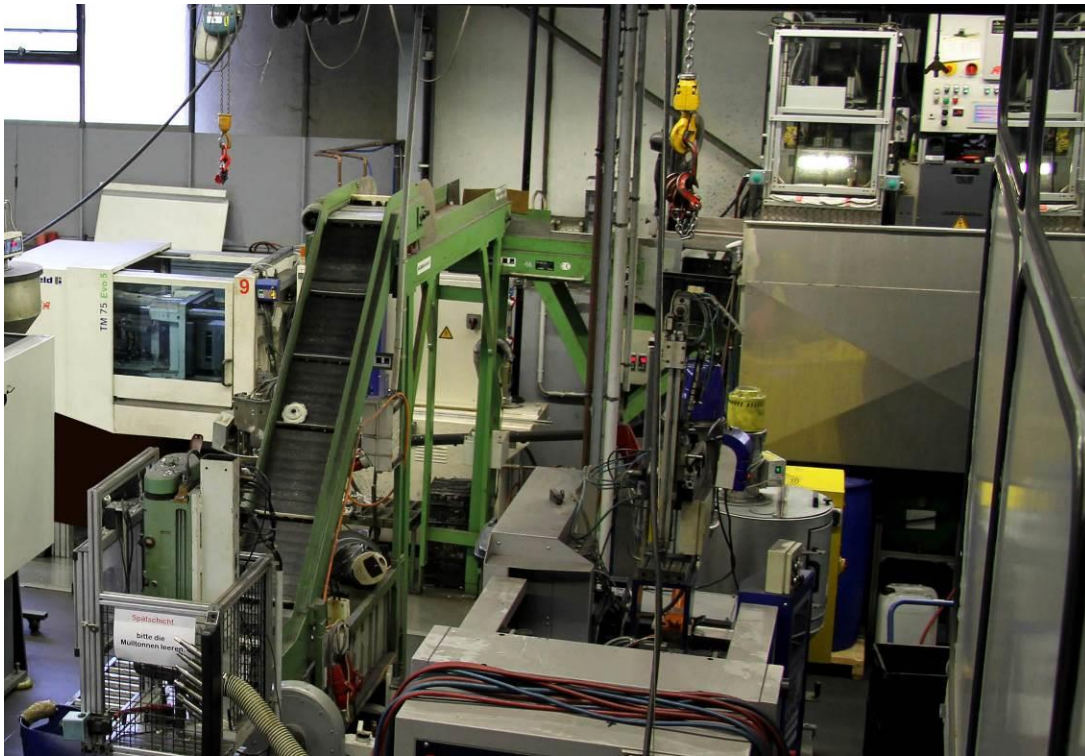


Fig. 3: For the core melting process, Ackermann has converted a TM machine model from WITTMANN BATTENFELD (shown on the left).



Fig. 4: Impeller wheel – manufactured with lost core technology
from the left: metal core, insert-molded plastic, finished impeller wheel



Fig. 5: Handle with internal cavity – produced with the AIRMOULD® internal gas pressure process from WITTMANN BATTENFELD



Fig. 6: Housing components made of transparent plastic



Fig. 7: Typical small parts for general mechanical engineering made by Ackermann

The WITTMANN Group

The WITTMANN Group is a worldwide leader in the manufacturing of injection molding machines, robots and peripheral equipment for the plastics industry. Headquartered in Vienna/Austria, the WITTMANN Group consists of two main divisions, WITTMANN BATTENFELD and WITTMANN, which operate 9 production facilities in 6 countries, including 32 direct subsidiary offices located in all major plastics markets around the world.

WITTMANN BATTENFELD focuses on independent market growth in the manufacturing of state-of-the-art injection molding machines and process technology, providing a modern and comprehensive range of machinery in a modular design that meets the actual and future requirements of the plastic injection molding market.

WITTMANN's product range includes robots and automation systems, material handling systems, dryers, gravimetric and volumetric blenders, granulators, mold temperature controllers and chillers. With this comprehensive range of peripheral equipment, WITTMANN can provide plastics processors with solutions that cover all production requirements, ranging from autonomous work cells to integrated plant-wide systems.

The syndication of the WITTMANN Group has led to connectivity between all product lines, providing the advantage plastics processors have been looking for in terms of a seamless integration of injection molding machines, automation and auxiliary equipment – all occurring at a progressive rate.

Contact:**WITTMANN BATTENFELD GmbH & Co. KG**

Werner-Battenfeld-Strasse 1

D-58540 Meinerzhagen

Tel.: +49 2354 72 – 0

Fax: +49 2354 72 – 485

info@wittmann-group.com

www.wittmann-group.com

Hugo Ackermann GmbH & Co. KG

Volmestrasse 129

D-58566 Kierspe/Westfalen

Tel.: +49 2359 9086-0

Fax: +49 2359 9086-36

info@hugo-ackermann.de

www.hugo-ackermann.de