

NEWS RELEASE

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[Witt-NR-19-2018 Climate-chamber-Wolkersdorf]

Development work on dryers in the climate chamber

The WITTMANN material handling technology plant (including sheet metal production) has been located in Wolkersdorf, Lower Austria since 2015. The WITTMANN dry air dryers, which are sold worldwide, are among the products developed there. These are exposed to extreme conditions in the climate chamber on site, to make sure that the appliances show the reliability promised by the name WITTMANN at every place in the world.





Inside views of the climate chamber at the Wolkersdorf production plant of the WITTMANN Group.

Right next to the showroom in Wolkersdorf, on an area of some 35 m², the actual heart of the material handling technology's R&D department is situated, the climate chamber. Of course access to it is prohibited while tests are in progress, yet numerous interested visitors to the showroom still take the opportunity to have a look through the viewing window into the interior of the chamber.

The climatic conditions prevailing in Austria and Central Europe certainly vary a lot, but on the whole are not so extreme that they would present a real challenge to dry air dryers. However, it is indispensable to test appliances which operate with the ambient air under extreme conditions as well. After all, WITTMANN dryers operate in all conceivable areas of the world, and so they must cope everywhere with the local ambient temperature and air humidity.

Test results and adaptations

Right from the planning stage of the Wolkersdorf production plant, the climate chamber installed there was included in the design. It offers a room completely insulated from the outside world and equipped with an ultra-modern air conditioning system, which is able to simulate an extremely wide range of ambient climatic conditions.



The dimensions of the chamber are laid out to accommodate not only mobile and battery dryers for test purposes, but also entire drying systems. This makes it possible to specify at an early stage the necessary adaptations to specific requirements on various local markets.

All dryers are exposed to a great variety of ambient conditions. The test results are recorded using the OPC protocol and included in relevant documentations, from which the locally required adaptations can be derived in each case. For example, if a dryer operating in Europe or North America is able to reach an excellent dew point value with standard equipment and in standard operation, specific adaptations still need to be made to reach a comparable result under tropical conditions.





Hermetically sealed from the outside, the climatic conditions currently prevailing inside the chamber can be retrieved by using a touch terminal.

It goes without saying that one of the most recently developed new products in the area of drying technology, the WITTMANN **ATON** segmented wheel dryer, was optimized in terms of drying performance and energy efficiency with the help of tests carried out in the climate chamber. WITTMANN dryers score with the option to have the actual dew point shown on their display – unlike various products from competitors, which only display the set target value.

	Temperature	rel. Humidity	Dew point	Water load
	[°C]	[%]	[°C dp]	[gr/m³]
Test climate I	35	50	23	19.8
Test climate II	37	50	25	22.1
Test climate II	37	57	27	24.9
Test climate IV	35	67	28	26.6

Examples of test conditions created inside the climate chamber: dry air dryers from WITTMANN must pass these tests without exception.



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 8 production facilities in 5 countries, including 34 direct subsidiary offices located in all major plastics markets around the world.

WITTMANN BATTENFELD focuses on the 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 plantwide 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.

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