

NEWS RELEASE

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[Witt-NR-06-2019_Storage-place-surveillance]

Safety through storage place surveillance

A central material drying and handling system, which delivers materials to all processing machines in a plastics production plant, is often accessible to all staff members working on such a production floor. Therefore it requires special security measures. Well-planned central systems offer several different options in this area. For instance, the appliances included in a central system from WITTMANN can be blocked by a key lock function, or the entire system can be protected in such a way that login to its individual components is only possible by entering a user name and password. Alternatively, a user administration can be installed which can be operated via RFID cards.



WITTMANN M7.3 IPC touch-screen network control system.
On the right, a barcode scanner is mounted on the wall.
The control system monitors the material flow
from the material source to the processing machine.

For the installation of a coupling station, the recommended choice is a WITTMANN CODEMAX coupling station, which implements control of the mechanical material flow interfaces via contactless coding. All existing interfaces and every single action taking place in a central system from WITTMANN are visualized on the WITTMANN M7.3 IPC touch-control panel. Via the M7.3 IPC control system, it is even possible to check, for example, the connection between a given material source and a drying silo. For the control system only releases a transport from the material source – say, an octabin container – after receiving confirmation that the barcode to match that material (affixed, for instance, to the outside of the octabin) has been read in by an appropriate barcode scanner.



In response to long-unfulfilled demands from plastics processors, such safety features have become to a certain extent a part of the standard equipment for central systems today. For traceability and comprehensive production reliability has come increasingly into the focus of attention, together with the realization that any efforts in this area must start with the production staff responsible for operating the equipment. The user administration of the **M7.3 IPC** control system requires a user name and a password. Each operator can be admitted to or barred from using various parameter setting options. Login to the system and logout from it, as well as all parameters set can be saved including a timestamp.



Symbols for storage place monitoring on the M7.3 IPC network control panel:



Green background = trouble-free Red background = error signal

Material supply invariably starts with the material source. In most cases, the source is an octabin, a big bag or a mobile container – and this is where the vast majority of errors occur. Even when the material sources are provided with barcodes, this does not necessarily mean that material supplies are only set in motion by qualified equipment operators. The risk of using a wrong material source, when the type of material is not checked, should not be underestimated. In this case, the dryer would be loaded with the wrong material. Since access to material sources does not generally require any login procedure, these sources must be protected by special security measures.

For its central stations, WITTMANN offers a storage place surveillance system to take care of this task. Whenever an unauthorized access is registered – for example unauthorized opening of a safety gate – all appliances which could cause incorrect materials handling are automatically stopped, and an error signal is issued as well. When the gate is subsequently closed again, the appliances which have been stopped stay inactive. Only when the correct material is reported again to the control system via the barcode scanner will the material transport be resumed. The behavior of the system in the event of octabins or similar containers being replaced can be preset via the control system. A lamp at the storage place signals to equipment



operators to which material source(s) he has access at any given time, and which sources are barred. After the material source has been exchanged, the relevant barcode is scanned in once more for verification, and then the material transport can be continued.

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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