Bauerschmidt embraces innovation.
Automated processes in film production.

The film manufacturer Bauerschmidt, based in Floh-Selingenthal in the German state of Thuringia, has a somewhat relaxed attitude to production peaks. This is in no small part thanks to the addition of a new production facility in which the semi-automated and digitalised flow of materials is supported by an Automated Guided Vehicle System (AGV) of the type ERC 215a. In collaboration with Jungheinrich, the company devised a logistics concept that not only permits flexible expansion but also raises transparency and efficiency in the plant by a significant margin. The AGV is integrated in the existing IT and software landscape via the Jungheinrich Logistics Interface, thus enabling seamless communication between the workforce and the trucks.

SMART LOGISTICS FOR THE FUTURE.

In the face of rising production volumes, staff shortages in the company's three-shift operation and an increased incidence of transport damage, the managers of Bauerschmidt decided to restructure the company's production operation. In conjunction with Jungheinrich, a future-proof logistics concept was developed that reduces the strain on employees in the long term and massively increases performance in the production facility. Not least due its extensive experience in the field of automation, Jungheinrich was entrusted with the digitalisation of the company's warehouse processes and commissioning of an Automated Guided Vehicle System.

PROGRESS THROUGH AUTOMATION.

The result of this undertaking is an efficient combination of manual and automated warehouse operations, in which an Automated Guided Vehicle System of the type ERC 215a ensures reliable transport of the raw materials and finished goods between the individual warehouse areas. The use of a Jungheinrich AGV allows redundant activities to be automated so that they can be executed without the need for additional personnel. This not only optimises the transport structures within the warehouse but also makes damage to machines and racks a thing of the past.

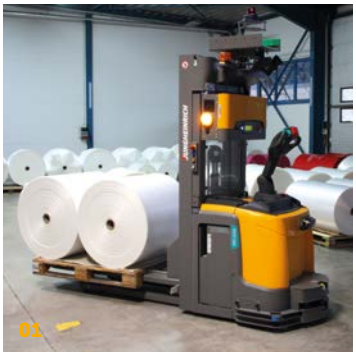
For a perfect symbiosis between man and machine.

TRANSPARENCY AND EFFICIENCY.

The Jungheinrich Logistics Interface ensures sophisticated integration of the ERC 215a system in Bauerschmidt's existing IT landscape, thus making the warehouse processes extremely transparent. Moreover, digital communication across the entire packaging line allows all transport tasks to be completed with maximum efficiency. Barcode scanners with excellent reading performance deliver a high degree of process reliability, while sophisticated lithium-ion technology guarantees outstanding throughput rates combined with maximum availability.

01
Semi-automated material flow using the Automated Guided Vehicle System of the type **ERC 215a.**

02
Automation of redundant warehouse processes, such as assembly and final packing, by means of a **Jungheinrich AGV.**



> "Standing still was never an option for us."

Horst Bauerschmidt
Managing Director
Bauerschmidt KG & Bauerschmidt Kunststoff GmbH

In conversation with Horst Bauerschmidt

What were the main reasons behind your decision to implement a semi-automated system for your production operation?

As a constantly growing company, we had reached the limits of our production capacity, and this prompted us to expand our site with a new production facility. To create a flexible and expandable solution for the future, we decided to employ an Automated Guided Vehicle System for recurring processes such as assembly and final packaging. We chose Jungheinrich as a competent partner for implementing this project, not least due to the company's long-standing expertise in the field of automation. Together we devised a logistics concept that can be easily expanded with additional automated vehicles and creates a perfect symbiosis between the trucks, warehouse personnel and AGVs.

What are the benefits of employing an Automated Guided Vehicle System, particularly with regard to your operation and workforce?

The main benefit is that all production units can interact with each other. After just one year, the various processes involving the industrial trucks, warehouse staff and AGVs have merged together to form a perfectly harmonious workflow. Recurring tasks have been replaced with fully automated processes, thus freeing up valuable employee capacity. After a brief adjustment period, in which our employees studied the behaviour and main functions of the AGVs, they can now focus all their attention on production duties and product quality. This new division of labour is working very well for us.

Why did you opt for a lithium-ion drive for the ERC 215a, and what are your initial impressions of it?

As a manufacturer of innovative film products, we attribute great importance to such subjects as sustainability and environmental awareness. Just as we dream of plant-based films that simply turn to dust after use, we also wish to embrace regenerative energy sources when it comes to the operation of our trucks. It was clear to us from the outset that we required a solution with automated charging processes. We wanted an autonomous, low-maintenance system that would ensure reliable operation and maximum efficiency with night-time charging, without requiring any further effort on the part of our employees. Based on these criteria, the ERC 215a with Li-ion technology was the logical choice for us.

THE PROJECT AT A GLANCE

Customer:	Bauerschmidt Kunststofftechnik GmbH
Sector:	Film production
Company size:	60 employees
Location:	Floh-Selingenthal, Germany
Warehouse size:	Approx. 2500 m² warehouse space / 2000 m² production space

CHALLENGE

Automation of assembly and final packing in order to make optimum use of existing personnel capacity and cope with rising production volumes efficiently and without transport damage.

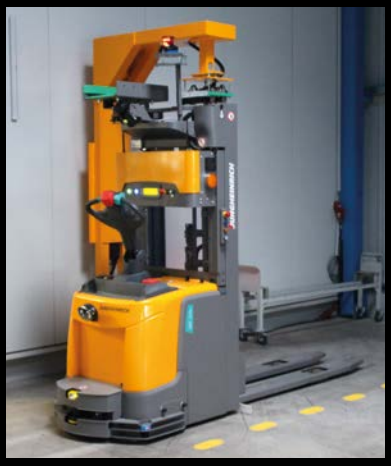
JUNGHEINRICH SOLUTION

An Automated Guided Vehicle System of the type ERC 215a, which effectively bridges the gap between autonomous trucks and experienced employees, thereby ensuring smart logistics processes and high-quality film production.

RESULTS

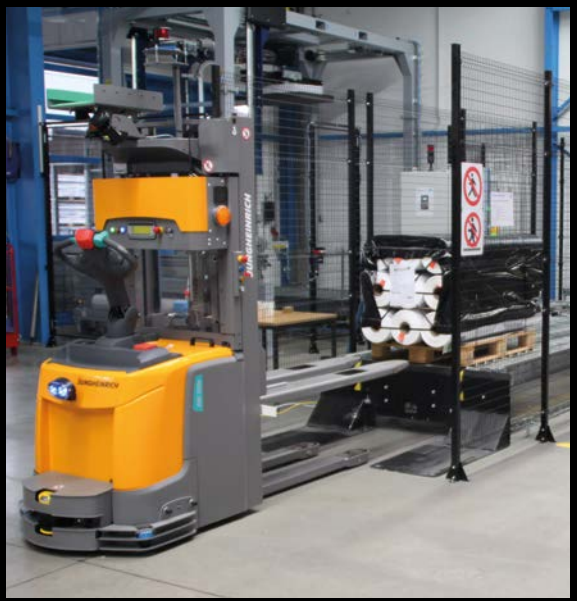
The three-key elements of Bauerschmidt's semi-automated production operation: intelligent self-controlled processes, greater transparency in the logistics chain and maximum truck availability thanks to advanced lithium-ion technology.

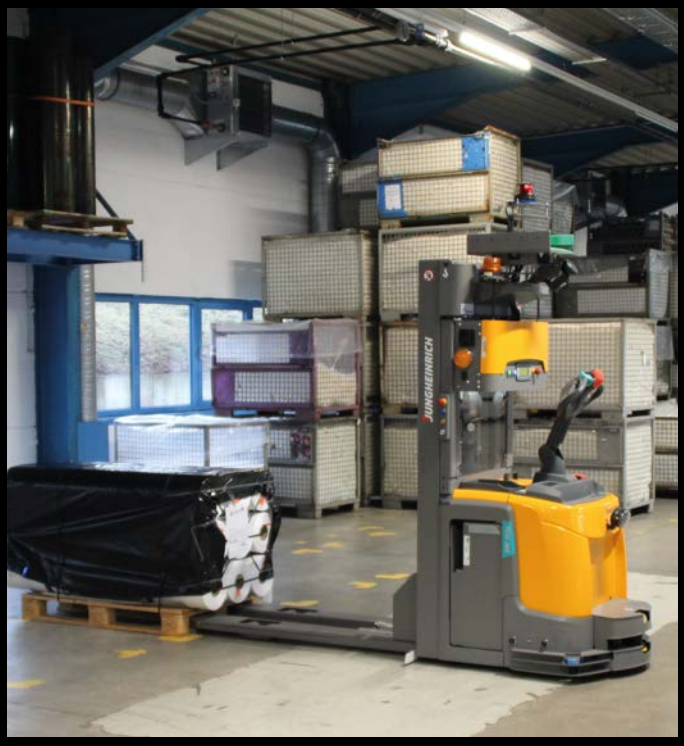
IMPRESSIONS



Semi-automated material flow using the Automated Guided Vehicle System of the type **ERC 215a.**

ERC 215a with lithium-ion technology and automatic charging – lack of battery replacement saves time and costs.





Recurring tasks in warehouse operations are completed fully automatically by the **AGV**.

JUNGHEINRICH

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