

Reference report

Contact person



Moritz Lange

☎ +49 371 2371-119 📠 +49 171 2139 624
 📠 +49 371 2371-150

Email: moritz.lange@sigma-chemnitz.de
 Internet: www.rfid-tracking.de/en

About SIGMA

As a renowned system house group, the SIGMA Group acts as a system integrator and partner of renowned providers in the IT sector. The more than 80 employees of the group form a competent team at the locations Chemnitz and Dresden. With know-how, competence and more than 30 years of experience we offer our customers reliable and powerful IT solutions.

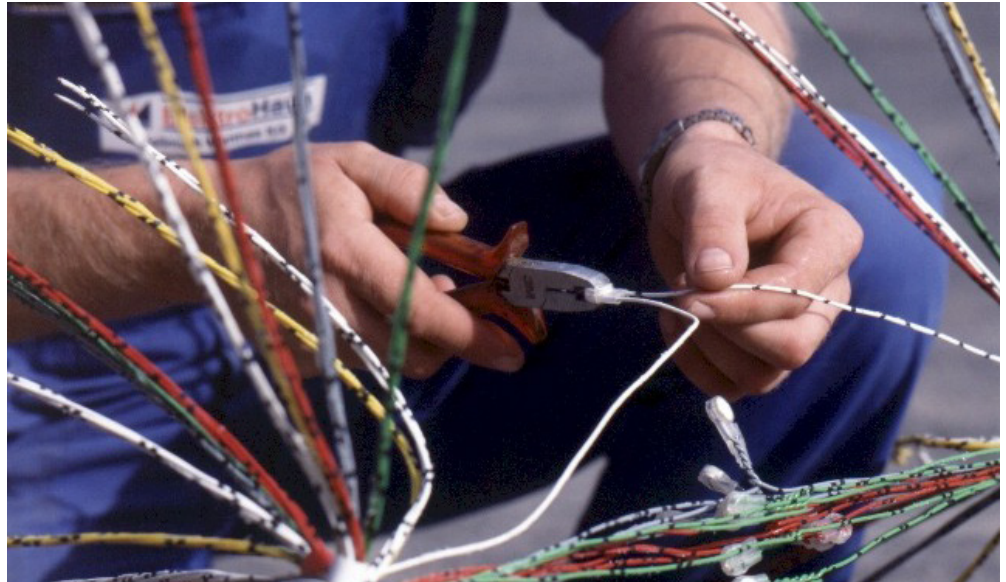
About our AutoID and RFID solutions

AutoID and RFID solutions for production, logistics and supply chain. Our customers appreciate us as competent, innovative partner, to accompany them from the initial problem analysis until the goal with commitment. Many years of project experience of our employees form the foundation for effective AutoID and RFID solutions for production, logistics and supply chain.

About Hellmuth Matthes KG

Hellmuth Matthes KG is a family-owned company based in Bautzen that has been synonymous with reliable electrical installation and plant engineering since its founding in 1990. Its range of services extends from electrical installations in industrial, commercial, and residential construction, through the construction of low- and medium-voltage systems up to 30 kV, to solutions in the fields of energy, digitalization, and infrastructure. With an experienced team, the company carries out projects both regionally and nationwide.

Automatic Access Control with RFID



www.matthes-kg.de

Implementation as part of a gate system project with Hellmuth Matthes KG

As part of a gate system project by Hellmuth Matthes KG, an automated vehicle identification system was implemented using RFID technology from SIGMA Enterprise Solutions GmbH. The solution enables convenient and reliable access control in day-to-day operations.

Current Situation and Challenges

Hellmuth Matthes KG, based in Bautzen, is a well-established family-owned business specializing in electrical installation and plant engineering. Active in the market since the fall of the Berlin Wall, the company is known for its technical expertise, practical solutions, and durable installations. To this day, the company remains family-owned.

In day-to-day operations, controlling access to restricted areas posed a recurring organizational challenge for Hellmuth Matthes KG's customers. Manually opening and closing gate systems was time-consuming and disrupted workflows, particularly when employees were frequently entering and exiting the premises.

The goal was therefore to implement an automated, reliable, and weatherproof solution for identifying authorized customer vehicles as soon as they approach the gate area.

RFID Technology: Real-Time Automatic Vehicle Recognition

In collaboration with SIGMA Enterprise Solutions GmbH, an RFID-based access solution was implemented that automatically identifies vehicles as they approach the gate. The solution is based on UHF RFID technology from Kathrein, a long-standing technology partner.

Equipped vehicles are uniquely identified via RFID transponders. Identification is contactless and fully automatic. The gate opens immediately after a successful authorization check. The use of AES encryption protects communication between the transponder and the reader system against unauthorized reading and tampering.

The result:

A convenient and secure access process that requires no manual operation of the gate system.

Integration into the gate infrastructure

A key focus of the project was the reliable integration of RFID technology into the existing gate control system. Through close collaboration between SIGMA Enterprise Solutions GmbH and Hellmuth Matthes KG on the RFID system integration, a robust end-to-end solution was successfully implemented.

The combination of:

- precise RFID recognition technology
- professional electrical integration
- weatherproof outdoor installation

ensures consistently stable operation under real-world conditions.

Greater efficiency in day-to-day work

Employees benefit directly from automatic access control in their day-to-day work:

- Elimination of manual gate operation
- Time savings when entering and exiting
- Reduction in workflow interruptions
- Increased convenience for authorized vehicle users
- Enhanced process reliability in access management

Vehicle detection occurs quickly, reliably, and contactlessly as soon as a vehicle approaches the gate area.

This is what our customer says...

„The RFID solution for automatic access control works reliably. Vehicles are accurately detected, and the gate opens without delay. This saves time in day-to-day operations and ensures smooth workflow. Coordination during the project was also straightforward.“

Michael Kupke, Project Manager, Hellmuth Matthes KG