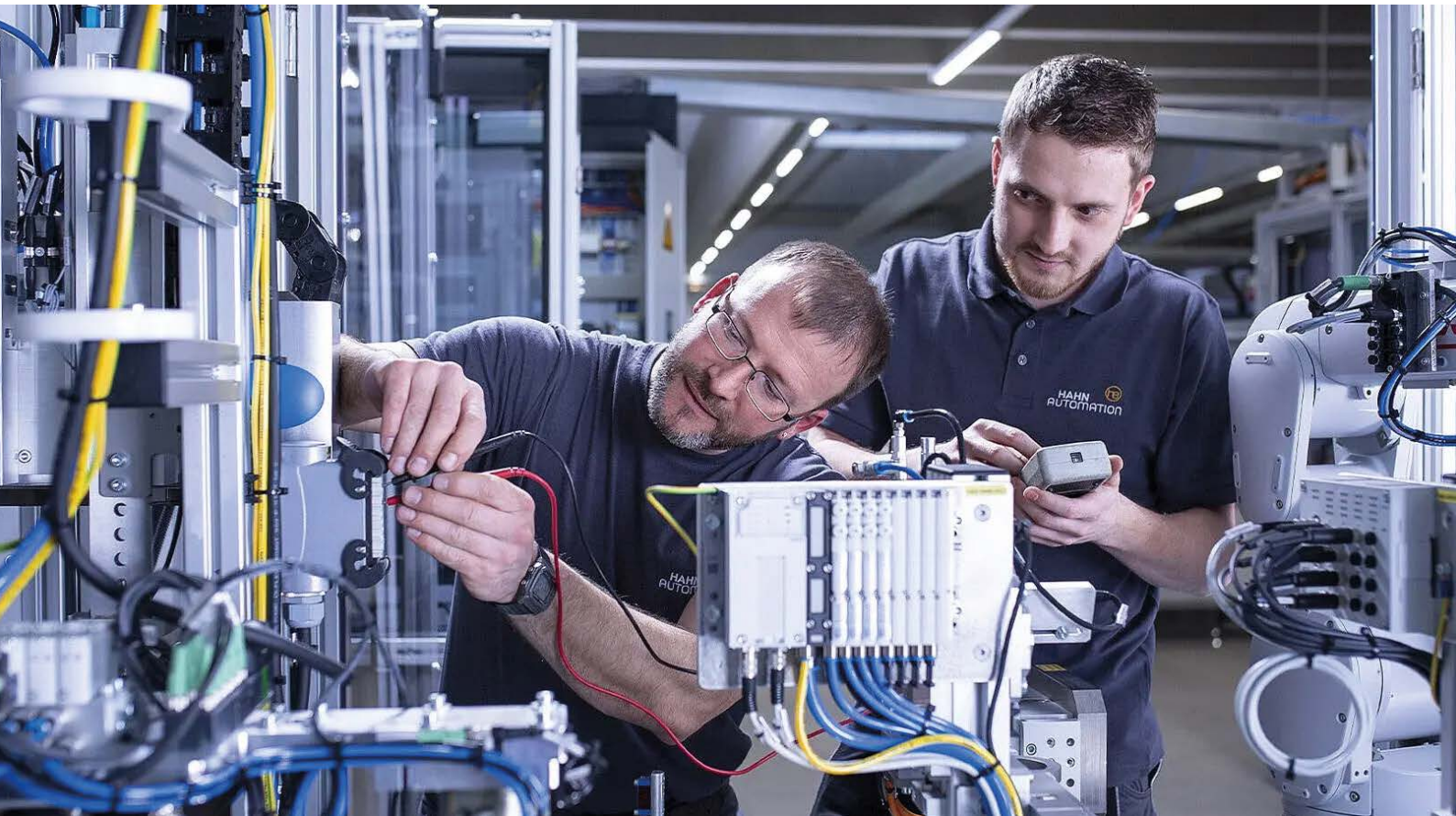


Casestudy | Industry | Silent Bricks

# HAHN Automation Group



The HAHN Automation Group is a special-purpose machine manufacturer that builds industrial assembly lines for small and medium-sized assemblies in the automotive, medical technology and electronics sectors. The globally positioned company, present in several countries, is able to support projects worldwide, with the same quality at all locations. The target group is customers with global supply chains and global product logic.

HAHN scores points with its demanding customers through complete in-house manufacturing expertise for special-purpose machines. The company manages end-to-end projects from concept to on-site commissioning. In doing so, the company acts like a system integrator, but for industrial assembly processes.

# How the HAHN Automation Group makes its backup resilient

The company, with around 1,300 employees, currently has 7.6 petabytes of installed storage. Globally, huge amounts of data are generated for the design, documentation and revision of systems in operation. The systems have long runtimes at customer sites and require highly individual support in service, which is again associated with data collection, data access and data analysis, in some cases reaching more than 20 years into the past.

The challenge for IT therefore lies not only in the data volume, but also in the complexity and the very demanding way in which users access data across locations.

For several years, the goal of the HAHN Automation Group has been to build large production storage environments while minimizing costs. The topic of backup, especially with regard to authentication and retention times, has been a priority not only since a ransomware incident.

For years, HAHN has used an individual implementation of Veeam Backup & Recovery, collected decentrally but consolidated into three large central backup disk storage systems. The backup access rights were also controlled via AD, which was common in Veeam at the time, but had proven to be a weak point. This prompted the company to make major improvements. In combination with Veeam, the Silent Bricks from FAST LTA are used for the rapid recovery of critical systems.

## Challenge

**1** 7,6 Petabytes of data volume

**2** Demanding data access

**3** Global Backup architecture

After the ransomware attack, in-house forensic specialists helped gain insight into which data was affected, but this took several weeks. It also became clear that backup as such does not help as protection against a ransomware attack, due to the speed and, if necessary, the need to scan certain areas again with antivirus protection during the restore.

*“Backup is a great thing for problems in production, patches and maintenance, but not necessarily for ransomware,”* explains Frank Benke, Head of IT at the HAHN Automation Group.

Based on risk management considerations, the IT team started an initiative to clarify key questions:



**Where is backup/restore indispensable?**

**How do you ensure that it is carried out at maximum speed and quality?**

**How do you ensure, in the event of a major cyberattack, that the company is operational again after one week?**

The approach favored by the IT team was a division into a “Red Zone” and a “Grey Zone”. In the event of a massive attack, production would be “scorched earth”, as Benke calls it, and therefore in the red zone. In the grey zone are systems that are only activated in an emergency to clean data.

## Corruption-proof backup medium required

The solution lay in a storage system with high data transfer performance and prioritization of restore jobs. This would make it possible to quickly restore the inventory and job control from the backup. This would then be followed, at the push of a button, by the automated rollout of all operating systems, including hypervisors, on clean installation media.

The IT team was aware that for all critical data assets that are part of the “crown jewels”, a corruption-proof backup medium is required. HAHN therefore needed a reliable secure storage solution for fast recovery.

*“Our central requirements were performance, immutability and air-gapped, which led us directly to FAST LTA. Within our storage environment, the Silent Bricks from FAST LTA are a special solution for exactly these requirements, integrated into our overall backup strategy. We no longer have to wait for forensics to approve the backup point, but can start with the core systems within a few days,”* explains Benke.

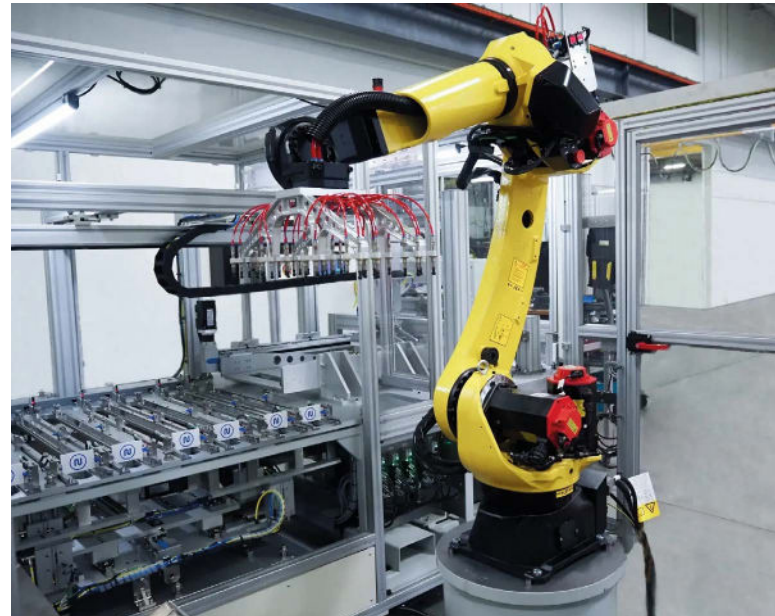
## Solution not imposed, but developed together

*“We gave a lot of thought to the architecture. Our aim is to do a lot ourselves and to understand in detail what we operate. The options that FAST LTA offers had been on our radar for years. When the use case became tangible, we approached FAST LTA, and the solution configured for us fit well within our budget framework. The solution was not imposed by FAST LTA, but developed together with our team, so that it fits into our concept and runs without problems. We also put FAST LTA to the test afterwards and everything turned out to be very reassuring,”* confirms Benke.

FAST LTA was implemented in January 2025, and commissioning went completely smoothly. *“In the period that followed, FAST LTA support informed us that new firmware updates were available. We installed these together, which worked flawlessly. The system runs stably, even after a power shutdown over a weekend, when we completely shut it down and restarted it for the first time. The Silent Bricks from FAST LTA work very well*

*with Veeam,”* says Benke.

Most recently, the IT team tested the interaction of FAST LTA with the new Veeam version. They also tested whether the restore from FAST LTA works directly on Proxmox, as well as the recovery from FAST LTA to VMware, all of which worked very well.



## Fast Clone Support significantly reduces backup window

The HAHN Automation Group uses Fast Clone Support from FAST LTA with Veeam Backup & Recovery, which significantly reduces the backup window, as Synthetic Fulls are usually created weekly. To avoid duplicate data as much as possible, the Silent Bricks file system can reference and link data blocks after they have been written.

A Synthetic Full created in this way then consists almost entirely of references to the data blocks already present on the storage system. Veeam refers to the process of creating such a “link collection” as Fast Clone. This is much faster and requires significantly less storage space than repeatedly writing a “real” full backup.

## Implementation

**1**

**Jointly developed, customized solution**

**2**

**Smooth implementation and commissioning**

**3**

**Stable operation and seamless interaction with Veeam**

## Augmented Reality, Digital Twins and AI: optimally equipped for current and future requirements

Data use at HAHN also extends to Augmented Reality and Digital Twins, meaning the simulation of the complete construction and operation of systems and the replaying of operating scenarios with real data. This generates relatively large amounts of data, not only process data, but also 3D-enriched simulation data. The company sees potential in this approach to substantially change working methods in mechanical engineering.

The HAHN Automation Group also considers itself optimally equipped for future backup requirements. *“AI is already a topic, but the data volumes have not yet changed substantially. AI does not necessarily mean that new data is created, but rather that existing systems are networked for more intelligent data use, such as data from a vector database with metadata. With future AI jobs, the question will be how the data volume develops, how much retention time is needed and how the running backup system behaves in scenarios with increased AI use.”*



## FAST LTA gives the HAHN AG a great deal of security in possible crisis scenarios

Ransomware extortionists rely on companies paying the ransom in a situation of uncertainty. Companies' willingness to pay is declining, but ransom demands are increasing, which can quickly become existential.

*“We are proud that we did not pay a ransom during the ransomware attack at the time. With FAST LTA, we are now much better positioned. In the event of a compromise, we can now rely on the fact that certain steps in the validation process are not required. This saves time, which is known to be scarce in crisis situations. A backup architecture that focuses on everything important, delivers the necessary performance, offers immutability and enables air-gapping gives us a great deal of security in such scenarios.”*

### Results

- 1 Modern backup environment also for future requirements**
- 2 More security in possible crisis scenarios**
- 3 Fewer hurdles in the crisis management process**

## About the HAHN Automation

The HAHN Automation Group is the global solution partner for factory automation. The company stands for industry-specific know-how, an extensive project portfolio and a global organization with one-stop service focus. Customers in the automotive, electronics and MedTech industries benefit from expertise based on more than 30 years of experience and international innovation.

As a special-purpose machine manufacturer, the company focuses on the development, construction and integration of customized, high-performance automation and robotics solutions for manufacturing companies. With its modular and flexible concepts, HAHN is able to deliver, depending on requirements, semi- and fully automated production lines, customized manufacturing and test systems or standard robots for every individual application.

**Hello.**

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**FAST LTA**

