German innovator
**Symestic** enables digital factories of the future with a cloud-based MES.

Manufacturing execution systems (MES) have been a building block in modern production lines to monitor, control, and optimize the entire manufacturing operations. Yet, existing MES solutions often entail astronomical upfront investment and are complex to deploy.

Founded in 1999, Symestic aims to help global manufacturers increase operational efficiency with a cloud-based MES platform that is affordable, scalable, and easy to implement.

To transmit machine data from their IoT edge gateways (known as Symestic IoT boxes) to the MES application, the company needed an IoT communication solution that goes beyond a normal SIM card. Using the EMnify platform, Symestic has the full transparency and control required to provide a robust MES solution to worldwide production plants – including those of large German manufacturers like BITO, Brita, and Erlenbacher.

**About:**
- Headquartered in Dossenheim, Germany
- Industry: Smart manufacturing
- Products deployed across five continents

**Goal:**
Helping global manufacturers optimize production efficiency, quality, and sustainability through digitalization.

**Solution:**
Plug-and-play IoT edge gateways and a secure, scalable cloud-based MES platform.

**EMnify’s products in use:**
**Connect:**
- Multi-network, global IoT SIM: Best cellular connections inside production plants.

**Operate:**
- Web Portal: Complete visibility into connectivity and data usage.
- OpenVPN: Remote troubleshooting of edge devices distributed at customer sites worldwide.

“With EMnify, we no longer have to worry about the communication of our IoT boxes to our cloud system. Everything works just as expected, and we can easily look into device connections to check for any anomalies.”

**Uwe Kobbert**
CEO and Co-founder of Symestic
Driving error-free and on-schedule manufacturing processes

Maximizing throughput and product quality while reducing waste and costs are manufacturers’ ultimate goals. To this end, the Symestic MES solution allows companies to capture and analyze vital production metrics and process data, then derive informed decisions to optimize shop floor activities.

“What convinces our customers is the speed and ease of deployment. Our IoT boxes can be connected to existing machines and start collecting production inputs in a few hours, instead of weeks,” explained Uwe Kobbert, Symestic’s CEO.

Embedded with edge computing capabilities, the Symestic IoT box can pre-process data and only communicate relevant events to the cloud for analysis.

Symestic’s MES platform provides a powerful toolset for data visualization, risk evaluation, issue detection, and production reporting. The pay-per-use SaaS model helps to break down adoption barriers often seen in traditional MES systems.

“A typical MES project can cost anywhere between 100,000 and one million euros upfront,” remarked Kobbert. As the Symestic solution entails no CAPEX, manufacturers can start right away while scaling their service use easily.

“Another advantage of our system is that it can work alternatively without newer protocols like OPC-UA which are often not supported in brownfield deployments,” added Christian Fieg, Business Development Manager at Symestic.
A global platform that simplifies IoT communication

From day one, Symestic set out to distribute and grow their MES solution globally. The company decided to partner with EMnify as it strived to achieve this goal.

“The EMnify solution does not depend on a local carrier, so we do not have to talk to multiple operators,” said Kobbert. Using the EMnify global SIM, Symestic can rest assured that their IoT boxes are always using the best cellular network available.

But the company’s requirements extend far beyond connectivity. “We were looking for a provider that gives us not only a SIM card but also a platform where we can easily keep track of our device connections,” explained Kobbert.

After talking to several telecommunication providers, Symestic realized that none offered a management portal as transparent and user-friendly as EMnify’s.

Besides real-time insights into the device connection status, the portal allows Symestic’s operations team to monitor existing data consumption and the remaining allowance to ensure customers have uninterrupted data communication.

On top of that, EMnify’s OpenVPN lets the team remotely log into the IoT boxes for troubleshooting – without having to dispatch technicians to the site. This significantly reduces operational overhead given that many of their customers’ manufacturing plants are located outside Germany.

“We wanted a solution that would help us deliver our product anywhere in the world.”

– Uwe Kobbert
CEO at Symestic
Speeding up growth with more efficient processes

Symestic’s MES solution was created out of the vision to help manufacturers build their own digital factories and stay a step ahead of the competition.

Today, their system is up and running in global production lines across five continents, and the company looks to accelerate business expansion in the coming years. This will go in line with more streamlined operational processes. “At the moment, some of our tasks are still manually executed. As we scale, this becomes more time-consuming, and we plan to look into other EMnify platform services like REST API to better optimize our processes,” said Kobbert.

EMnify’s team of experts will continue to provide Symestic with the assurance and confidence they need to operate their solution at any scale.

“Whenever we need the support, we know who to call and always get a fast response. The experience has been perfect, and there are no serious issues we have encountered.”

– Uwe Kobbert
CEO at Symestic