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Success Story // Baking Industry //
GLOCKENBROT BÄCKEREI, Germany

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ProLei.T.

by **Schneider** Electric

State-of-the-art IT security in an industrial bakery

Globally, 39 percent of the security technologies used by companies are deemed outdated. In the world of IT security, the status of the utilized systems is of paramount importance. Recognizing this fact, GLOCKENBROT BÄCKEREI decided to upgrade its control system, manufacturing execution system (MES) and energy management to the latest Plant iT version from ProLeiT by Schneider Electric.

The story of GLOCKENBROT BÄCKEREI began long ago in 1904. Today, more than a century later, the once small bakery still maintains its tradition and the closely associated high-quality standards but has grown to become one of Germany's largest and most renowned bakeries. The company has been part of the REWE Group since 1986 and distributes its bread and baked goods throughout Germany.



Exterior view of the production facility in Bergkirchen

The bakery's range includes around 200 bread and bakery products sold in REWE, Penny and Nahkauf stores under its own, private and premium labels. GLOCKENBROT BÄCKEREI employs fully and semi-automatic baking and packaging equipment, utilizing programmed recipes for its production processes. And even if today's technology cannot be compared to the era when the bakery was founded, certain essential elements have not altered: The awareness of traditional values, high-grade quality and mastery of techniques.

GLOCKENBROT BÄCKEREI

Info

Company:
GLOCKENBROT
BÄCKEREI
Industry:
Baking Industry
Location:
Bergkirchen
Country:
Deutschland



Product portfolio

Challenging upgrade

Since 2005, GLOCKENBROT BÄCKEREI has been in a strategic partnership for automation success with German software manufacturer ProLeiT GmbH, whose process control system ensures vertical and horizontal integration in the industrial bakery's plants. To reap the full benefit of the IT security measures, it was imperative to upgrade the existing systems to the latest version.

Addressing the topic of cutting-edge IT infrastructures and the associated security issues is becoming increasingly urgent in all sectors, including the bakery sector. The convergence of IT and OT creates new challenges and increases the risk of cyber-attacks. A holistic and transformative approach to security is, therefore, absolutely essential.

So, the decision was taken to upgrade: The start was made at the production facility in Bergkirchen, where GLOCKENBROT BÄCKEREI has been producing baked goods since 2010. In addition to the Plant Batch iT process control system, various other products of the Plant iT Suite are employed at the plant – the MES workflow management system Plant Integrate iT Workflow, the energy management system Plant Acquis iT EnMS and the interface manager Plant iT connect. All the systems were to be updated as part of the project.



Production in Bergkirchen

SUCCESS STORY // BAKING INDUSTRY // GLOCKENBROT BÄCKEREI

Digital project management and key user concept

Right in the middle of the COVID-19 outbreak, the project was hampered by several (partial) lockdowns. When the need to alter the working conditions arose at the start of the project in the second quarter of 2020, ProLeiT, as the digitalization partner, was already well-versed in the available opportunities for team and project management. Consequently, fully digital collaboration employing contemporary software tools was promptly established.

Transition to the new version, accompanied by enhanced usability, prompted concerns about how swiftly all employees would be able to adapt to the updated system while maintaining their accustomed efficiency. However, these concerns were quickly dispelled by ProLeiT's proven key user concept: For instance, GLOCKENBROT BÄCKEREI's project team designated one key user each for the control system, MES and energy management areas. They were seamlessly integrated from the outset during the project specification phase and actively participated in all stages, from planning and factory acceptance testing (FAT) to final commissioning. Today, they serve as the primary points of contact for their colleagues regarding any queries related to their respective areas. Further, ProLeiT organized training courses to effectively equip GLOCKENBROT BÄCKEREI staff for subsequent operation of the new system after commissioning.

The adoption of state-of-the-art digital collaboration tools streamlined workflows and enhanced overall efficiency and transparency in work processes. The resources saved were then redirected into other project-critical steps.

Optimization included

In addition to the upgrade, optimization of GLOCKENBROT BÄCKEREI was also a top priority. To pro-actively shape the future and to create a distinct advantage over competitors, it is crucial to consistently analyze, assess and enhance both products and production processes. Ultimately, these optimizations serve as the cornerstone for achieving a sustainable increase in efficiency and a lasting reduction in operational expenses.

To this end, GLOCKENBROT BÄCKEREI and ProLeiT identified areas for improvement at the very start of the project and came up with corresponding measures. Several of them were implemented during the ongoing upgrade, resulting in immediate process enhancements, heightened transparency and flexible production. This, in turn, contributed to a decrease in investment costs.

No time for downtime

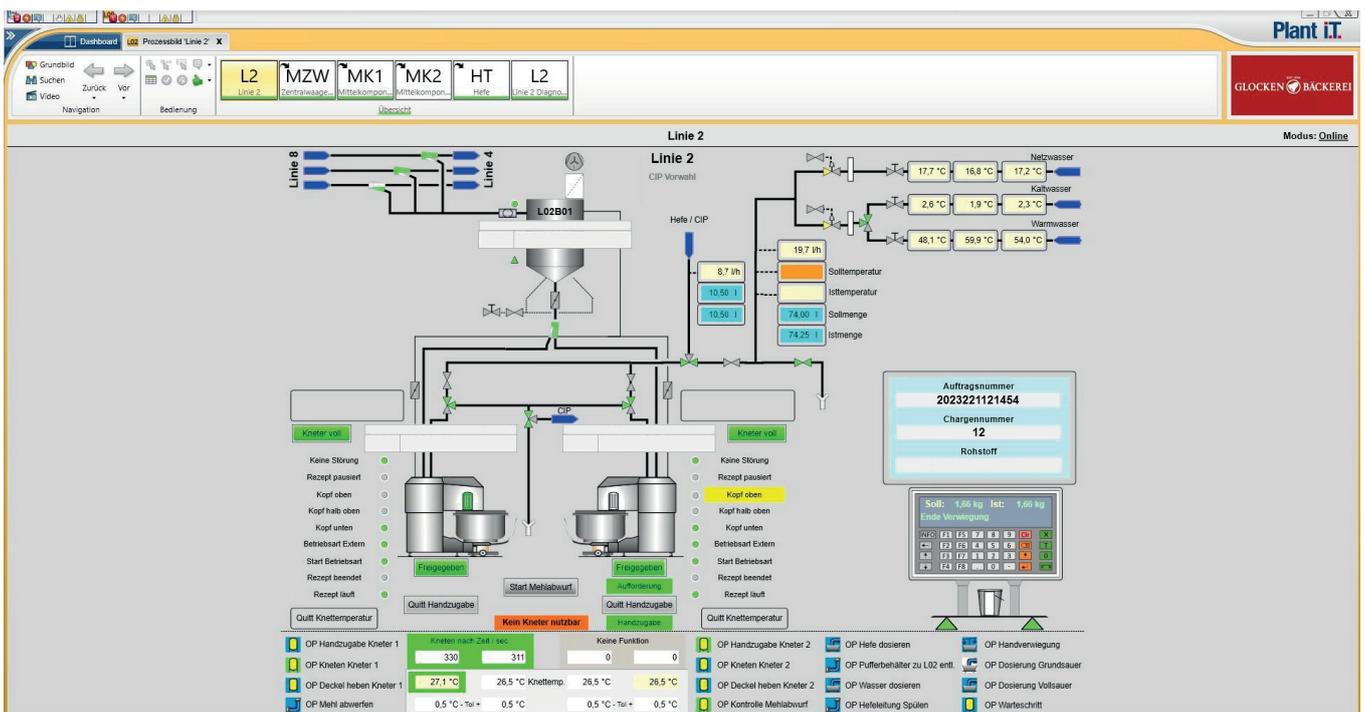
A significant challenge arose from the fact that – as is normal in this sector – GLOCKENBROT BÄCKEREI could only deal with very short periods of downtime. The time window for the entire upgrade was set to just eight hours. Successfully executing a project of this magnitude within such a constrained time frame undeniably presents a challenge, requiring unwavering collaboration from everyone involved.

In her summary, Beatrix Durlesser, the responsible ProLeiT project manager at the time, says: "The key to success was the solution-driven approach. Thanks to our sector-specific expertise, we were able to meticulously plan and prepare the process in close collaboration with the customer.

Consequently, we devised redundancy concepts and were fully prepared for any risks or eventualities. Moreover, the exceptional collaboration with the project team at GLOCKENBROT BÄCKEREI deserves special praise.” She continues to explain: “Projects where customers work with such determination and pragmatism to ensure their success are always something special.”

Ralph Dörfel, production manager at the GLOCKENBROT BÄCKEREI production facility in Bergkirchen, also draws a positive conclusion: “The upgrade has enhanced user experience, making operation even more intuitive and straightforward. Our staff were using the new version safely and effectively after just a few days. This was an important factor for us, as they are the ones who have to work with the system on a daily basis. Moreover, multiple applications are now achievable, thereby greatly enhancing routine workflows. The selection of individual plants enables clear and quick access to the desired visualizations and order lists. The upgrade gave us the chance to do away with old patterns, behaviors and ways while incorporating new and useful applications. Thanks to its high level of production data transparency, the latest version of Plant iT Suite not only provides us with a high level of IT security but also enables us to meet the challenges that Industry 4.0 may bring. Furthermore, we profit from the flexibility of the system. ProLeiT proved to be a proficient and dependable strategic partner, particularly in the field of consulting. Its expertise enabled us to swiftly address initial challenges together as a team.”

After the upgrades in Bergkirchen at the start of 2021, followed by Frankfurt in the subsequent fall and additional follow-up projects, GLOCKENBROT BÄCKEREI not only meets its current security requirements but has also paved the way for achieving even greater transparency and digitalization in the future.



Process screen line 2



Ralf Dörfel,
Production manager / Bergkirchen production facility, GLOCKENBROT BÄCKEREI



Beatrix Durlesser,
Team leader and deputy department manager at ProLeiT GmbH



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