



The specialist for industrial buildings.

SCHOTT SCHWEIZ AG

INSIGHT



The technology group SCHOTT AG, headquartered in Mainz (Germany), is one of the world's leading manufacturers of specialty glass, including glass primary packaging for pharmaceuticals. At its St. Gallen site, SCHOTT produces, among other products, prefillable syringes made of high-quality polymer (COC) for globally relevant companies in the pharmaceutical industry. This has been an overwhelming success: the steady growth of the market and demand for high-quality primary packaging required a massive expansion of production with ambitious timing. IE Plast entered the race and realized the complex project as a total contractor in record time.

SCHOTT TOPPAC® pre-fillable polymer syringes enjoy an excellent reputation in the pharmaceutical industry around the world. They are manufactured in a continuous and fully integrated process involving injection molding, siliconization, camera inspection, finishing, and packaging in blister packs and tubs. Strict quality controls supported by modern technology guarantee consistently high quality in accordance with strict international standards. Market success has consequences: as the production lines set up on the lower floor of the manufacturing building were unable to cope with the steadily increasing demand, an expansion of production became inevitable. The obvious idea was to install a cleanroom on the upper floor, which had previously been used for storage and logistics purposes. This had to be done in a confined space, without interrupting operations and with an ambitious deadline. A highly ambitious project. And for IE Plast, an opportunity to position itself as a trustworthy partner in a highly complex project.

CONFIDENT HANDLING OF COMPLEXITY.

EXPANSION OF CLEANROOM PRODUCTION AT SCHOTT SCHWEIZ AG



«Our expansion project was characterized by time pressure and complexity. In IE Plast, we had a partner who handled these demanding requirements with confidence and was able to ensure that production could start on schedule.»

*Mario Haas,
Head of SBF Polymer Solutions*

SUCCESS FACTORS

1

IN FAST-TRACK-MODE ON THE GO

REDUCED PLANNING AND EXECUTION TIME.

It was evident to the project managers at SCHOTT that only one planning partner would be suitable for the cleanroom project at the St. Gallen site, one that would bring three key skills to the table: firstly, comprehensive knowledge of industrial production in the plastics and life sciences environment. Secondly, in-depth cleanroom, GMP, and building services expertise. Third, experience in dealing with difficult conditions, which proved to be particularly critical in this project due to the fact that construction was taking place while the cleanroom was in operation in the same building. The choice fell on IE Plast. The planning company had already supported SCHOTT with strategic advice during the site evaluation. However, the question of coordinating the different interests and priorities in this case was more pressing than usual because the construction site was located directly above the ongoing cleanroom production and within the intralogistics areas. By involving representatives from operations planning, production, logistics, and quality management in the construction planning, it was possible to find a feasible approach for all parties involved.

2

COMPREHENSIVE STATIC REINFORCEMENT OF THE BUILDING

LONG-TERM GUARANTEE OF PRODUCTION SAFETY.

Converting the existing storage room into a cleanroom on the upper floor of the factory building may have seemed like a simple undertaking on paper. However, the reality was quite different: the upper level of the building was in no way designed for use as a cleanroom. The building's construction did not allow for the installation of heavy production lines. Nor was the ceiling system designed to accommodate the additional loads of the cleanroom and building services. The first phase of the conversion project therefore consisted of erecting a parallel steel support structure, including a technical platform. In addition, an emergency staircase was attached to the building in such a way that the seismic risks could also be significantly reduced. To increase the payload, reinforcements had to be installed at around 800 positions above the existing cleanroom. The facade, which was in need of renovation, required the existing facade to be dismantled and the entire building envelope to be renewed. Disruption to the GMP environment or even temporary shutdowns of operations were not an option. To avoid contamination and prevent production disruptions, the IE planners developed a well-thought-out protection concept with the corresponding phasing of the construction work – all in close coordination with the client.

3

EARLY COMMISSIONING OF THE FIRST NEW PRODUCTION LINE

IMMEDIATE INCREASE IN PRODUCTIVITY.

Meticulous, jointly developed, and closely coordinated overall planning made possible what is generally considered unfeasible in standard practice: even while construction work was still in full swing, a cleanroom cell was completed to such an extent that an entire production line could be brought in in stages and the installation, which took several weeks, could begin. This also required the provision of a temporary media supply. It was only thanks to these extensive preparations of the production infrastructure that the ambitious schedule could be met and the increase in volume accommodated.

4

RACE AGAINST TIME WON

GUARANTEES INSTEAD OF VAGUE PROMISES.

Ambitious timing requires rigorous planning and absolute discipline in project management. Thanks to its many years of experience in industrial construction for hygiene-sensitive production processes, IE Plast is familiar with the pitfalls and challenges that can hinder or even set back the project process. IE Plast's methodical "inside-out" planning approach also plays a key role in avoiding detours and unnecessary compromises in the functionality of an industrial manufacturing structure. During the execution phase, IE Plast's close management and coordination of the trades ensured that construction work progressed according to schedule. IE Plast's guarantee of adherence to costs, deadlines, quality, and functionality gave SCHOTT the assurance that the new production lines would be commissioned on time.

5

SCHOTT AND IE PLAST AS PROFESSIONAL PROJECT PARTNERS

SUCCESSFULLY OVERCOMING COMPLEXITY.

From the outset, the client and the IE planners were aware that the complex renovation project could only be successfully implemented through close cooperation. In intensive dialogue between experts on both sides, solutions were sought and quickly found for the sometimes difficult questions regarding the construction process in a hygiene-sensitive environment. The constant availability of the planning teams and the short decision-making processes also contributed significantly to the success of the project. The fact that the qualification process, which was led and carried out by IE specialists, was integrated into the construction process had a positive effect.



SERVICES PROVIDED BY IE PLAST

- › Overall responsibility as total contractor



10 MONTHS

- › Planning period

8 MONTHS

- › Construction period

MARCH 2020

- › Completion



1000 m²

- › Cleanroom area



IE PLAST

The specialist for industrial buildings.

We are the IE Group: Your specialist for industrial buildings.

We plan, design, and construct industrial buildings. Our goal is to maximize the efficiency of your production - with the help of industrial buildings that are perfectly tailored to your manufacturing processes. We work in manageable and therefore effective teams of industry experts whose motivation and initiative you can rely on. Because at our company, all employees are involved in the business. It goes without saying that we also give you guarantees on costs, deadlines, and quality. **IE Plast, IE Food, IE Life Science, and IE Technology** are part of the IE Group, which has been on the market since 1966 and offers the necessary financial backing - even for large construction projects.



AT HOME IN YOUR INDUSTRY



ENTREPRENEURIAL THINKING AND ACTION



ALL EXPERTS UNDER ONE ROOF



SECURITY THROUGH GUARANTEES

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