



PLAST

The specialist for industrial buildings.

B. BRAUN MEDICAL AG

INSIGHT



Swiss medical technology specialist B. Braun Medical produces highly specialized single-use plastic products at its site in Escholzmatt in Entlebuch. The product range extends from syringes for infusion pumps to extraction ports for infusion bags. Due to the continuous expansion of its own portfolio and the planned introduction of new products and product systems, it was necessary to expand the existing production capacities on the existing site. As general planner, IE Plast took on the challenge of specifically implementing the ambitious vision of a factory of the future and creating significantly more space for the development of new technologies.

B. Braun Medical AG is one of the oldest and most successful suppliers of high-quality pharmaceutical and medical technology products worldwide. The plant in Escholzmatt in Entlebuch, built in 1973, is the first of a total of four production sites in Switzerland. Over the years, continuous investment in the site has enabled it to develop into one of the most modern facilities in the group. In order to maintain this status in the future, a decision was made in 2014 to carry out an extensive expansion. This involved not only doubling the clean room production capacity, but also reorganizing all processes and replacing the existing sterilization system with a new, more efficient one.

HOLISTIC GENERAL PLANNING AND EXPANSION DURING ONGOING PRODUCTION.

PLANNING AND BUILDING OF A
**FUTURE-ORIENTED FACTORY FOR
PLASTICS PRODUCTION** UNDER
CLEANROOM CONDITIONS.



SUCCESS FACTORS

1

INCREASING ENERGY EFFICIENCY AND REDUCING OPERATING COSTS WITH

BINDING QUALITY ASSURANCE.

B. Braun Medical's catalog of requirements for the new building largely corresponded to a vision of the factory of the future: doubling clean room production capacities, optimizing and automating logistics processes, replacing sterilization, reorganizing plant traffic with new access ramps, and constructing a new tool manufacturing facility. This was intended to significantly increase the energy efficiency of the production processes and ensure a high degree of flexibility. On the one hand, this was to enable the company to respond to the rapidly changing market environment and new technologies at any time in the future. On the other hand, it was to reduce operating costs in the long term. These are high requirements, which IE Plast, as the general planner with bundled expertise, the necessary industry experience, and optimal flexibility, easily meets - including binding cost, schedule, function, and quality commitments.

2

INDUSTRY EXPERIENCE, CLEANROOM EXPERTISE, AND COMPLEX MANUFACTURING PROCESSES

EVERYTHING FROM A SINGLE SOURCE.

IE Plast was selected following a rigorous selection process. The decisive criterion was industry experience: IE Plast had already demonstrated its familiarity with complex manufacturing processes in medical technology in numerous construction projects for the plastics industry in Germany and abroad. IE Plast is also very familiar with the industry-specific requirements and demands of industrial production of plastic products under clean room conditions. Competence in all disciplines of modern industrial construction makes IE Plast the ideal partner and competent general planner.

3

„STATE OF THE ART“ CLEANROOM AND BUILDING SERVICES CONCEPT

OPTIMALLY COORDINATED PLANNING AND PROFESSIONAL EXECUTION .

When developing the cleanroom concept, B. Braun Medical was able to rely on the many years of experience of the experts at IE Plast, who can draw on comprehensive expertise in the field of cleanroom production. Based on planning tailored to the production technology and spatial conditions, a risk-based zone concept (up to ISO 8) was created. The zones are defined in such a way that the primary packaging is located in the cleanroom, while the far less critical secondary packaging remains outside. The flow of people is also consistently separated from the flow of goods, with short walking distances increasing productivity.

The building services concept was developed taking into account the specific requirements in the cleanroom and the adjacent processing areas. It includes the supply of electricity, compressed air, cooling, ventilation, and air conditioning. In some cases, the new systems could be linked to existing systems and existing capacities could be used efficiently. The supply of the new sterilization system posed special challenges for the planning of the building services. However, by combining the expertise of IE Plast, the system manufacturer, and B. Braun Medical, the installation was professionally designed and successfully implemented.

4

CAREFUL COORDINATION OF OPERATIONAL AND CONSTRUCTION PROCESSES

BUILDING WHILE BUSINESS CONTINUES AS USUAL.

Construction planning without interrupting operational processes is one of IE Plast's core competencies. This requires the coordination of all operations and construction processes as well as close cooperation between the plant managers and the construction management team. Only in this way is it possible to keep the production facilities running without downtime. Thanks to a well-thought-out phasing of the construction work and the temporary facilities that were set up, it was even possible to maintain the cleanroom status of the existing production facilities. As a result, production capacities remained at the same level throughout the entire construction period.

5

DESPITE AMBITIOUS TIMING AND EXTENSIVE CONCEPT PLANNING

DIALOGUE FOR CONFIDENT DECISIONS.

The project was launched in mid-August 2014. By the end of January 2015, the development of the concept for the new production capacities had progressed so far that the building application could be submitted. Excavation work began in the first week of March. Thanks to the collaboration between experts from B. Braun Medical and IE Plast, the extension was successfully completed within 18 months. The new facilities were ready for operation on August 8, 2016, and the new building was inaugurated on September 16.



18 MONTHS

› Planning and construction period



12.500 m²

› Floor space of the extension building



CHF 33 MILLION

› Investment volume



SERVICES

- › General planning of the extension
- › Planning and implementation of a cleanroom concept
- › Development of the building services concept
- › Staging of the construction work
- › Doubling of production capacities



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

CONTACTS

IE Life Science Zurich
Wiesenstrasse 7
8008 Zurich | Switzerland
T +41 44 389 86 00
zuerich@ie-group.com

IE Life Science Munich
Paul-Gerhardt-Allee 48
81245 Munich | Germany
T +49 89 82 99 39 0
muenchen@ie-group.com