



TECHNOLOGY

The specialist for industrial buildings.

HLM

HLM LEUTHOLD MECHANIK AG

INSIGHT



Leuthold Mechanik AG (HLM) develops and manufactures high-precision machines, devices, and tools at its headquarters in Einsiedeln. In order to ensure sensitive high-tech production in the future and to guarantee compliance with the highest hygiene requirements at all times, various plants were to be consolidated at a central location while continuing to operate. This required not only a feasibility study for the conversion of an existing furniture factory and an innovative hygiene concept from a single source. As general planner, IE Technology also took on the optimization of the entire production and operational processes.

HLM is one of the world's leading manufacturers of machines for the production of thin-walled aluminum packaging. For more than 40 years, the company has been synonymous with maximum precision in the production of equipment, machines, and tools used by companies in the automotive and aircraft industries as well as in the medical, food, and packaging industries. In order to significantly increase the efficiency of its own operational processes and reduce energy costs in the long term, all existing locations were to be consolidated into a central location. Based on a feasibility study, an existing industrial building was then converted and, starting in 2010, the move to Einsiedeln took place in stages. Without disrupting ongoing production, a customer-specific high-tech location was realized within three years, featuring a well-thought-out hygiene concept with clear zoning and controlled flows of goods and people.

GENERAL PLANNING AND RELOCATION OF A HIGH-TECH PRODUCTION SITE WHILE BUSINESS CONTINUES.

**CONVERSION OF A
FURNITURE FACTORY
INTO AN INDUSTRIAL BUILDING
WITH A HYGIENE CONCEPT AND
OPTIMIZED PRODUCTION PROCESSES.**



« The construction costs ended up being exactly as estimated, all deadlines were met, and we are benefiting in the long term from the significantly increased efficiency of our manufacturing processes.»

*Heinz Leuthold,
CEO, HLM Leuthold Mechanik AG, Einsiedeln*

SUCCESS FACTORS

1

INCREASED EFFICIENCY AND REDUCED OPERATING COSTS THROUGH

INDUSTRY-SPECIFIC EXPERTISE.

In order to fully understand HLM's extensive operations and meet the sometimes demanding hygiene requirements, comprehensive planning expertise, industry-specific know-how, and extensive specialist knowledge in the areas of clean rooms and lean production were required. A conscious decision was made not to work against the structure of the building, but to carefully adapt the existing architecture. This was the only way to increase efficiency across all areas. At the same time, operating costs were permanently reduced by using the waste heat generated during compressed air production to heat the administration building.

2

INNOVATIVE HYGIENE CONCEPT WITH CONTROLLED FLOWS OF GOODS AND PEOPLE

EVERYTHING FROM A SINGLE SOURCE.

In order to meet the high hygiene requirements, a 6,000 m² area was separated off in the existing hall, where the particularly sensitive production and development of high-tech components and metal finishing would later take place. The comprehensive hygiene concept, planned from a single source, includes clear zoning, controlled goods and personnel flows, and controlled air exchange. Access to the white zone is only possible via badge-controlled doors or, from other zones, via airlocks, ensuring that even the highest hygiene standards can be easily met. Even modern hygiene changing rooms are part of the well-thought-out concept to better coordinate staff access to particularly sensitive areas.

3

OPTIMALLY COORDINATED PLANNING AND PROFESSIONAL EXECUTION BASED ON A

COMPREHENSIVE FEASIBILITY STUDY

For the planned conversion of the former furniture factory, it first had to be clarified whether the existing industrial buildings were even suitable for the manufacture of sensitive high-tech products and how they could be designed in the best possible way. After all, the structure or condition of an old building is not always suitable. It is of little use if the conversion ultimately remains a poor compromise. It was therefore necessary to carry out a feasibility study in advance and to understand the specific operating procedures of the individual plants down to the smallest detail. This was the only way to ensure that the processes at the new location could be optimally tailored to each other and that the sometimes high hygiene requirements could be met without any problems.

4

CONVERSION OF EXISTING INDUSTRIAL BUILDINGS AND

STAGE-BY-STAGE RELOCATION WHILE BUSINESS CONTINUES.

Construction planning and execution without major disruption to operations processes is one of IE Technology's core competencies. In close cooperation with HLM, an intelligent concept was developed for the phased relocation and conversion over a period of three years. The aim of the comprehensive execution planning was to minimize disruption to ongoing production both in the old plants and at the new location. Thanks to close coordination between IE Technology's construction planning and HLM's relocation management, there was a maximum of one day of downtime per machine during the entire relocation and construction phase.

5

DESPITE EXTENSIVE PLANNING,

ALL DEADLINES AND COSTS WERE MET.

Both the gradual conversion of the furniture factory and the relocation of the individual production sites were completed as planned after three years. Not only were all deadlines met, but the total cost of the construction project also ended up being the same as the initial estimate.



3 YEARS

› Planning and construction period



17.900 m²

› Scope of construction



CHF 25 MILLION

› Investment volume



IE TECHNOLOGY SERVICES

- › General planning of production halls and an administration building
- › Development and implementation of a hygiene concept
- › Staging of conversion and relocation during ongoing production
- › More efficient production processes and lower operating costs
- › Support with certification



IE TECHNOLOGY

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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