



Building under challenging conditions

Due to steadily increasing demand for baby food and plans to expand its product portfolio with specialty products, food company Nestlé decided to build a second wet line - called New Wet Line (NWL) - at its Konolingen site. At the same time, new halls for milk delivery and central tipping as well as an energy channel were to be constructed. In many ways, this was a challenging project.

Nestlé commissioned IE Life Science in Zurich, a company specializing in industrial buildings, to plan and implement the project. IE Life Science had already carried out various construction projects for Nestlé in recent years to the satisfaction of the client. The expansion was carried out in accordance with the jointly developed master plan, which specified which existing buildings were to be repurposed, expanded, or replaced. The master plan and operational requirements indicated that the ideal solution was to construct the new wet line directly adjacent to the existing production facility in the middle of the existing site in order to ensure maximum flexibility between the individual production steps.

PLANNING AND CONSTRUCTION PERIOD

› 15 months

CONSTRUCTION SCOPE

- › Production area New Wet Line: 3.719m²
- › Production area Truck Tank CIP: 1.490m²
- › Production area CT: 850m²
- › Cubic capacity: 14.789m³

INVESTMENT VOLUME

› CHF 12 million

IE SERVICES

- › Construction planning and overall coordination
- › Planning of hygiene zones
- › Total contractor for construction execution



Cooperative planning for successfully managing complexity

Various aspects made project planning a challenging undertaking. These included, for example, the specific hygiene and zone-specific requirements for the production of end products with changing aggregate states from liquid to solid. Despite the demanding conditions, Nestlé pursued an ambitious schedule for this planning and construction project. The construction plan stipulated that the installation of the systems should take place immediately after the completion of each individual construction phase. The respective sections were approved for process installation after their completion.

Specific solutions for hygiene concepts and building services

Nestlé has its own strict standards for hygiene in production. These not only comply with the legal requirements for industrial food production, but also meet the standards applicable to pharmaceutical products. The planners at IE Life Science broke down the overarching zone concept into the respective areas and defined the corresponding construction measures. Together with Nestlé's production specialists, the hygiene details were continuously adapted to the specific situation. Hygiene safety in the New Wet Line was supported by a well-thought-out airlock and clothing concept. In terms of building services, the ventilation planning proved to be particularly complex due to the limited space available: some of the ductwork had to be installed outside the building. Inside, a ventilation duct was bricked in, as this was the only option for a zone-compliant solution that could also be accessed for cleaning and maintenance purposes.

Flexible overall planning and ongoing installation of production facilities

In order to ensure ongoing operations despite numerous interfaces with upstream and downstream processes, new construction phases were completed independently for each area. Only then were the connections to the old building opened and the production facilities installed, with special measures taken to ensure hygiene. An absolute novelty: for the installation of the large appliances and cleaning agent tanks, which were delivered in stages, removable concrete roof elements measured with millimeter precision were installed in the flat roof, which could be opened when the equipment arrived. Flexibility was also required in terms of construction site logistics, which had to be adapted to the limited space available. After a planning and construction period of 19 months, Nestlé was able to commission the New Wet Line and the other new facilities on schedule.

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