Implenia

Reference

Sika Kapaflex









SHORT DESCRIPTION

The architectural design of this factory enables flexible and efficient production and filling of adhesives, supported by just-in-time logistics and the use of SIKA materials.

THE PROJECT

The architectural realisation reflects the internal organisation:

- Production section for the manufacture of adhesives
- Filling hall including shipping area
- Office wing

The production section is a steel construction with concrete ceilings, which allows the production facilities to be converted at a later date without major structural alterations. The façade is a lightweight sheet metal construction, which also ensures a high degree of adaptability.

The adjoining office wing is clad as a concrete building with the same lightweight sheet metal façade, as it is closely

connected to the production wing in terms of volume.
The filling area is designed as a prefabricated concrete structure with a likewise prefabricated, anthracite-pigmented concrete façade.

The roof is designed as a bare roof with roof foil from Sika-Sarna. Together with the infiltration and retention basins in the grounds, it has a retention function for rainwater, which is achieved by limiting runoff.

The factory still has internal expansion areas for production and both internal and external expansion options for the filling hall.

Just-in-time' factory concept. The new continuous production method requires a continuous supply of raw materials and a continuous removal of finished goods. The factory is designed according to the 'just-in-time' concept with a small stock reserve. The raw materials are delivered on a daily to weekly basis and the finished goods are dispatched daily to a dispatch centre or directly to the customer. The production concept has a linear structure:

- Delivery area and storage zone in outdoor tanks for liquid and powdered raw materials
- Production area for prepolymer (mixing the basic components of the adhesives)
- Fine mixing area with the addition of product-specific additives in continuous mixers
- Filling area for the adhesive in cartridges, drums and other containers (according to customer requirements)
- Forwarding area for lorries with intermediate storage, railway loading hall for railway wagons.

An office and staff area is attached, and break rooms, quality testing laboratories and workshops are located within the production area. If possible, materials produced by SIKA should be used and visible in the building (concrete aggregates, epoxy floors, fire protection coatings, roofing membranes, sealants and adhesives).

SERVICES IN DETAIL

- Production section for the manufacture of adhesives
- Filling hall including shipping area
- Office wing

FACTS

Location	Düdingen , Switzerland
Status	completed
Construction volume (value of our services)	39 M CHF
Start of construction	January 2007
Completion	January 2018
Building owner	Sika Schweiz AG Tüffenwies 16 8048 Zürich
Architect	Widmer Architectes Sàrl Avenue Dapples 17 1006 Lausanne
Plot size	27000 m^2
Number of upper floors	4
Number of basement floors	1

Heating-ventilation-air-conditioning-sanitary (HVACS) planner	Tecnoservice Engineering SA Route de Beaumont 20 1700 Fribourg
Ventilation planner	Gruenberg + Partner AG Nordstrasse 31 8006 Zürich
Civil engineer	ICA SA Ingénieurs Civils Associés Route des Daillettes 21 1700 Fribourg

SERVICES

General/full-service contracting - technical equipment