

ROBERT BOSCH GmbH FACILITY EXTENSION Karlsruhe (Germany)

NEW BUILDING

Client: Robert Bosch GmbH, Stuttgart

Architects: Robert Bosch GmbH, Stuttgart

Our services:

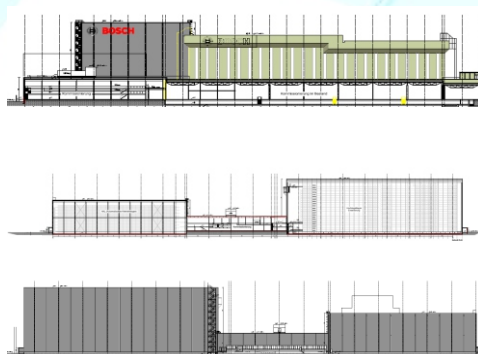
- Full structural design
- Establishing the basis
- Preliminary design
- Final design
- Approval documentation
- Execution drawings
- Preparation of contract award
- Structural fire protection
- Earthquake Engineering
- Advanced load calculation
- Static calculation and execution planning for piles
- Structural conditions
- Checking of workshop drawings

Brief description:

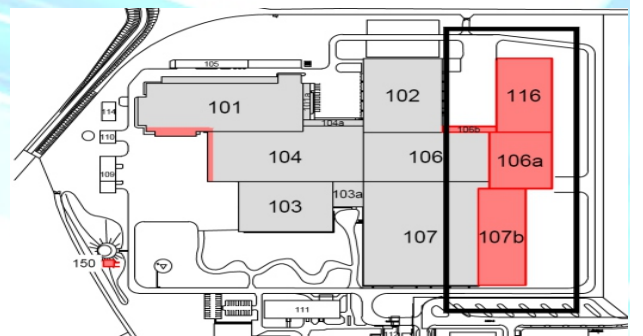
Extension of a logistics facility by three new halls consisting of an automated crate warehouse, a commissioning hall and a high-bay warehouse

- 1-storey halls as steel structure with partial connection to the existing buildings
- rectangular building floor plan with regular grid
- large-area halls with lengths of 70 m to 100 m
- combined pile and raft foundations
- elastically bedded bottom slabs with thicknesses of 0.5 m
- 1,300 bored piles with lengths of 9 m
- stringent requirements regarding to the deformation of the building (deformation limits) due to exact fit of the high-rise racks
- new reinforced concrete fire wall (40 m)
- flat roof structure (1.5 degree incline) using steel profiles and with trapezoidal sheet covering
- main girders with spans up to 15 m and secondary beams with spans up to 7.5 m
- stiffening of building by fire wall and diagonal profile steel stiffening system on the roofs and on the exterior walls

Completion: 2016



Commissioning hall under construction



Commissioning hall