

ADMINISTRATION BUILDING AND RESEARCH BLOCK EKATO Schopfheim (Germany)

NEW BUILDING

Client: EKATO Holding GmbH, Freiburg

**Certified
Inspection Engineer:** Prof. Dipl.-Ing. Matthias Pfeifer

Our services: Structural engineering inspection in accordance with regulations and standards
Static calculations
Structural fire protection
Earthquake engineering
Execution planning
Planning of prefabricated reinforced concrete parts
Sound insulation
Façade planning
Random monitoring of the structure during the building phase

Brief description: Expansion of existing site for a manufacturer of industrial blending and mixing machines
Administration building
- 5-storey reinforced concrete building, constructed partially from pre-fabricated reinforced concrete parts
- foundations in the ground water
- elastically bedded base plate
- basement constructed as a "White Tank"
- flat slabs
- partially composite steel floors (with official approval)
- rectangular floor plan, 58 m x 14 m
- glass facade constructed as a post and beam structure
Research block
- reinforced concrete construction, partially using pre-fabricated reinforced concrete parts
- pre-stressed reinforced concrete beams as trusses
- transfer of the manufacturing-related high loads via slabs with working loads of up to 40 kN/m²
- pre-fabricated trusses (C 50/60) with loads of up to 450 kN/truss
- crane runway in the building
- rails of the crane runway made out of steel resting on reinforced concrete columns
- rectangular floor plan, 68 m x 27 m
- height of building 13 m

Architects: Planungsgruppe Industriebau,
Dipl.-Ing. Bernhard Tammer, Schopfheim

Structural engineers: IPM Ingenieure + Partner, Laufenburg

Completion: 2012



Pictures / Illustrations: PfeiferConsult, German Engineering Consultancy, Dipl.-Ing. Bernhard Tammer, Schopfheim