TRAFFIC ENGINEERING HALL, FACULTY 3 OF THE BTU Cottbus (Germany)

NEW BUILDING

Client: Planning office of the State of Brandenburg, Cottbus

Architects: Reiner Becker Architekten BDA, Potsdam

Our services:
Full structural design
- Establishing the basis
- Preliminary design
- Final design
- Approval documentation
- Execution drawings
- Preparation of contract award

Structural fire protecion
Vibration analysis
Prestressed concrete design
Thermal building physics

Brief description:
New building of an university research and laboratory complex
- 1-2-storey concrete structure to accommodate measuring laboratories and aircraft-engine test benches
- main load bearing structure consisting of 4 shear walls arranged as parallel pairs, respectively cantilevered in two directions by up to 7 m (T-shape)
- reinforced concrete slabs with spans of 24 m on prestressed concrete beams
- high dynamic loading of construction: test benches with high vibratory stresses
- vibration decoupling of test benches and labs, measuring laboratories with high precision requirements (in the nanometre range)
- prestressed roof trusses built as semi-finished units with supported filigree elements
- elastically bedded base plate

Completion: 2009

Pictures / Illustrations: Professor**Pfeifer**andPartner PartGmbB, Becker Architekten