

## PRAUNHEIMER WORKSHOPS Frankfurt/Main (Germany)

## **NEW BUILDING**

Client: Praunheimer Werkstätten GmbH,

Frankfurt/Main

Sander. Hofrichter Architekten, Architects:

Ludwigshafen

Our services: Full structural design

Establishing the basis Preliminary design Final design

Approval documentation Execution drawings

Preparation of contract award Structural fire protection

Brief description:

Construction of a new facility for 300 people with mental disabilities, consisting of a workshop building with an attached vocational training section, a day rehabilitation facility, a central office and rack storage

- four building sections divided from each

other by a fugue

- 2 floors

- rack storage and workshop constructed in steel and reinforced concrete: day rehabilitation facility and office in solid construction; educational area built using reinforced concrete, reinforced concrete composite and masonry

- foundation ground improved using

vibrofloatation technology
- shallow foundations partially completed using industrial floor slabs due to heavy duty usage from fork-lift truck traffic

- collision proof

- stiffening through floor, walls and bracing straps

- reinforced concrete flat slabs spanning up to 8 m

- steel supports (HEB 450) in the workshop

spanning up to 16 m, in rack storage up to 13 m
- reinforced concrete composite supports in educational area spanning up to 13.5 m

- canteen roof a lightweight trapezoidal sheet steel construction with a steel substructure (HEB 500) spanning 16 m

- barrier-free access

- flat roof planted and fitted with photovoltaic system

Completion: 2015













Pictures / Illustrations: Professor Pfeifer and Partner Part GmbB, Sander. Hofrichter Architekten, Markus Bachmann Photography