Description:

The metropolitan region of Hamburg saw the development of a superlative research facility: a 3.4 Kilometres long tunnel facility with multiple overground structures that is used to generate ultrashort X-ray flashes – 27,000 times per second and with a brilliance that is a billion times higher than that of the best conventional X-ray radiation sources. This facility allows scientist to disassemble materials to their finest atomic structure, benefiting scientific fields such as astrology or disease control. A large part of the research facilities and all of the institute´s administration is based in Schenefeld, where a new construction with two office floors and a laboratory floor have been built upon the research tunnels.

Lindner Reinraumtechnik was awarded with the complete fit-out of the laboratory units and clean rooms. These areas have been fitted with numerous products from the Lindner range, incl. ceilings, partitions, doors, floors and lock systems and improved with several custom solutions such as an entirely freestanding clean room with a specialized ventilation concept. In the office areas, Lindner AG created spatial separation between central passageways and offices by installing Lindner Partitions. Sound absorbers with fabric coating additionally improve acoustics. The second field of performance in the office areas were ceiling systems. LMD-E Hook-on Ceilings have been fitted in all offices and hallways, where their appearance was further improved by so-called expanded metal circles. With integrated ventilation systems and a perforation, the ceilings also serve functional aspects.

General:

<table>
<thead>
<tr>
<th>Concept/Product:</th>
<th>Clean rooms and operating theatres, Ceiling Systems, Partition Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Type:</td>
<td>Research buildings/Laboratory, Office buildings</td>
</tr>
<tr>
<td>Client:</td>
<td>European XFEL GmbH</td>
</tr>
<tr>
<td>Architecture:</td>
<td>BLUNCK+MORGEN</td>
</tr>
<tr>
<td>Company Division:</td>
<td>Lindner AG</td>
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<td>Completion:</td>
<td>2016</td>
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</tbody>
</table>
Completed Works:

**Clean room ceilings**
- Crossdata joint ceilings
- Line post cap ceilings

**Clean room partitions**
- Stand-crossbar construction
- Shell construction

**Clean room doors**
- Sliding doors
- Swing doors

**Clean room floors**
- Raised floors

**Clean room light fixtures**
- Panel mounted light fixtures
- Downlights
- Surface-mounted ceiling luminaires

**Building services**
- F0 Metal ceiling
  - LMD-E - Hook-on/Corridor ceilings
  - LMD-St - Expanded Metal ceilings

**Glass partitions**
- Lindner Life glass partitions

**Partitions**
- Metal partition - Lindner Logic

**Doors**
- Doors for wall systems - Lindner Plus