



Operations Area

Electronics

Client
IONAS A/S

Location
Lingby, Denmark



Cleanroom

IONAS A/S Cleanroom

Project Highlights

- Optoelectronic Manufacturing
- Class 100 and 10,000 Cleanroom
- Support Functions
- Upgrade to Existing Infrastructure
- Laser Laboratory
- Product Packaging Area

Project Description

Ionas A/S was created by the Center for Advanced Technology at Copenhagen Technical University. CH2M HILL IDC assisted in identifying a former telephone exchange as a new base for Ionas' glass on silicon manufacturing process. An innovative approach was taken to the cleanroom layout, with ducted air returns allowing deposition tools to be cleaned outside of the clean air stream.

The project was extended to a second phase with an economical 2.4 bay design incorporating bulkhead cluster tools.

The goal of this project was to provide an economical cleanroom design within the constraints of an existing building. A former basement created a subfab that allowed vacuum pumps and gas distribution to be placed outside the cleanroom. The various processes were located according to their best fit in the building.

The cleanroom bays contained photolithography, SEM, inspection tools, plus etch and deposition tools. Non-clean areas included laser labs and maintenance workshops. A packaged gasroom was designed that was delivered as an externally mounted container.