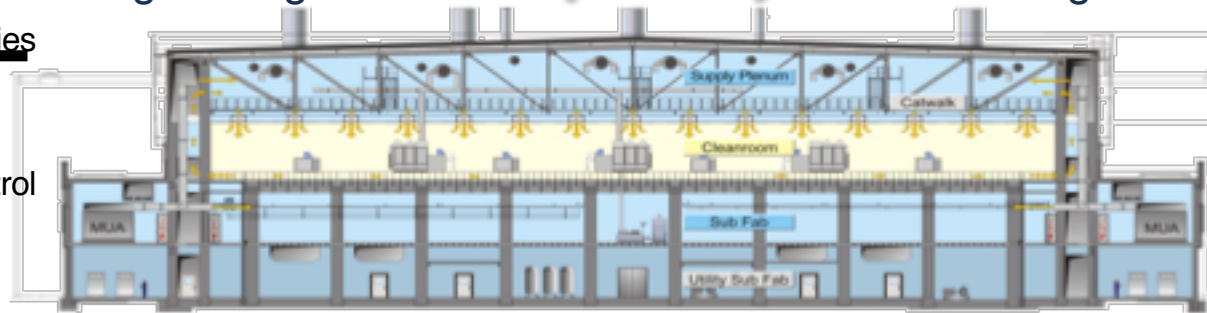


### Facility Test-bed

Facilities Engineering Focus

### Process Test-bed

Industrial Engineering Focus



#### Site-services Companies

- Support Systems
- Facility Design
- Engineering
- Contamination Control

Integrated Device Manufacturers (IDMs)

Original Equipment Manufacturers (OEMs)

### Equipment Test-bed

Materials Science Focus

### Data Test-bed

Data Science Focus



Central Management

Central Database

Central Storage

#### IT Platform Companies

- Analytics
- Networks
- Security
- Emerging IT

Advanced Sensors

Sub-Systems Companies  
(pumps, chillers, etc.)

Tool Data

Components Companies

Manufacturing Execution System (MES)  
Collects data, controls processes and tracks progress of wafers processed through almost 1,000 process steps.