

ISO 6 Microelectronics Cleanroom

Case Study

Application: 1,000 Square Foot - Class 1000 Cleanroom

Product: CleanLine S3000 with Flush Windows

Benefits Provided:

- ✓ Speed of Completion
- ✓ Corporate Showpiece for Attracting New Business



The Situation

Our client, a prominent player in the storage and handling solutions for the microelectronics industry, was creating a new business. The goal of this company was to capitalize on the company's cleaning technology and experience to fulfill a growing need in the market for cleaning services of sensitive semiconductor, microelectronics, and medical products.



The Challenge

Our client needed a customized cleanroom that could be quickly and efficiently constructed in order to get the new company up and running. Cleaning and drying equipment needed to interface seamlessly with the structural components and all windows needed to be flush with the wall to minimize any hidden areas for particulate. It also had to have a load bearing roof so that air filtration systems and other equipment could be mounted on the cleanroom envelope and not take up valuable space in their new facility. While they expected this business to grow rapidly, they still wanted to start small and utilize modular components that would allow them to expand without significant additional costs.

The Evaluation

Our client chose a modular cleanroom system from PortaFab that could be easily customized to fit their exact requirements and provided a cost-effective alternative to conventional construction. The modular system could also be built more quickly and would allow them the future flexibility they desired.

The Solution

The end product was a 1,000 square foot, class 1000 cleanroom that utilized PortaFab's CleanLine S3000 all aluminum stud system along with flush windows and aluminum/vinyl hardboard composite wall panels. It includes a main work area, a gowning room and an equipment room and provides effective control of air flow, pressure, temperature, humidity and filtration.

The Results

From the date of first contact, the cleanroom was completely finished in about six months and our client was able to launch its new cleaning services without any issues. Plus, the attractive high-tech look of the new class 1,000 cleanroom made it a showpiece for potential customers. The aluminum stud and wall systems created this impressive look that interfaced seamlessly with floors, ceilings and mechanical components to provide an ultra-clean environment.

Since its completion, the cleanroom has helped our client achieve significant business growth and to expand its business in the semiconductor, solar, optical, and medical industries. In fact, the versatility of the cleanroom facility has them anticipating additional growth in the coming year.