miriton

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Abbott Point-of-Care

Print AVIS, Print Chemistry and Bioreagents

Corkstown Road, Ottawa.

Project Statistics

Area description:	Class 10,000 Clean Room
Area size	9,500 sq. ft.
Project budget	$2,000,000

Responsibilities

Complete design three adjacent production spaces and laboratories having different humidity and cleanliness and levels of complexity.

Services Provided

- *Prime Consultant*
- *Architectural design*
- *Mechanical design*
- *Electrical design*
- *Project commissioning*

Project Objectives

To provide three spaces within one block of the building, those spaces being:

- AVIS and Print, a close temperature and humidity controlled, class 10,000 clean room used for printing of protein sensitive chemicals onto silicon chips.
- A chemicals preparation laboratory for the production of “chemical cocktails”.
- A bio-regents and an Immunology laboratory.

To reduce costs, these three spaces were designed and constructed as one project with different completion milestones and different space temperature, / humidity and cleanliness requirements.

To adhere to the strict specifications required to pass Abbott strict validation requirements.

Each space also required specialty gas services, Clean Dry Air (CDA), Nitrogen and De-Ionized (DI) water.

Challenges

To build three different areas with three unique timelines and space condition requirements.

To fit up the new spaces within an occupied building without interrupting ongoing manufacturing processes.

To make the best use of the existing infrastructure and equipment to achieve savings on schedule and budget.

Ensuring that the methods, materials and systems operation all met the very strict and exacting requirements of Abbott’s Global Standards, The Food and Drug Administration and Factory Mutual.

Solutions and Successes

- Utilized existing building equipment, equipment salvaged from another facility and new equipment, that was pre-purchased to achieve cost savings and reduce timelines.
- Designed exhaust systems dedicated to different types of exhaust fumes.
- Used cascading room pressures, non-permeable materials of construction and sealing techniques to limit humidity gains and transfer.
- Developed a comprehensive commissioning plan to test and prove each system individually and as an integrated system prior to releasing space for validation. This process helped ensure that the design conditions were met and operational efficiencies were at their best.