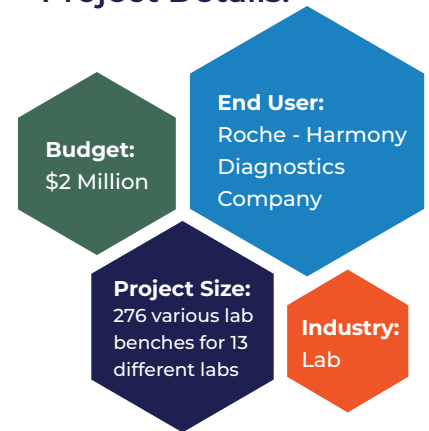


Supporting Explosive Growth in DNA Sequencing at Harmony - Roche with Innovative Modular Lab Benches

Project Details:



Background

In DNA sequencing, precision is paramount. Losing a blood sample can prevent a new mother from knowing if her baby has trisomy. Cross-contamination could lead to incorrect diagnoses of genetic defects, causing unnecessary distress or missed treatment opportunities. Lab technicians' safety is also at risk when handling diseased waste. These critical challenges underscore the need for robust, scalable solutions during explosive growth and technological change.

Harmony-Roche (formerly Ariosa), initially housed in a Santa Clara incubator, approached us to design a specialized table for their DNA sequencing needs. As their operations expanded from 1 to 20 tests per day, we executed a quarter-million-dollar project based on the original design. When Roche - Harmony's testing capacity surged from 20 to 20,000 tests per day, they partnered with us again to tackle the challenges of this unprecedented growth.

Problem

Rapid growth brings complexities. Managing a single DNA test is straightforward, but scaling to thousands daily introduces issues such as maintaining accuracy, preventing cross-contamination, and managing waste effectively. Ensuring efficient process flow with a high volume of tests required innovative solutions.

Solution

To address these challenges, we developed modular benches offering total flexibility tailored to high-volume DNA labs.

Key features included:

- High weight capacity benches on casters for mobility.
- Continuous grommets for versatile placement of power, data, and effluent.
- Phenolic surfaces for easy cleaning.
- Cabinets for accessible storage.
- Custom carts for safe and efficient waste disposal.



Results

Our solutions significantly reduced labor costs associated with liquid handling and waste management. The improvements also decreased personnel turnover, making Harmony one of the most desirable workplaces in the valley. Overall, we enabled Harmony to sustain their massive growth while maintaining high test quality and operational efficiency.