

INNOVATION = A NEW LEVEL OF PRECISION THAT OUTPERFORMS THE COMPETITION

INNOVATION AT A GLANCE

Client:

Global life sciences testing and analysis products manufacturer

Industry:

Medical Device Instrumentation

Synchroness services:

- » Project management
- » Mechanical engineering
- » Industrial design
- » Manufacturing support

Objectives:

- » Provide platform for system capable of high collection rates without compromising data
- » Provide intuitive user interaction and unparalleled ease of use in flow cytometry
- » Minimize footprint and cost to deliver the full benefits of a breakthrough in flow cytometry systems
- » Launch within 12 months



Challenged to develop a faster, more precise flow cytometer in just 12 months, our engineers designed, developed, procured, prototyped, and supported pilot production for a device that dramatically outperformed all competitors.

RESULTS

Design received excellent customer reviews and achieved a 3x footprint reduction.

INNOVATIVE ENGINEERING

Relying on our strong systems engineering skills, our team quickly developed technical requirements for a leading-edge cytometer launched as a strategy for innovation.

The team tapped into our organization's broad engineering expertise to ensure the right expertise was available at every phase of the project.

REINVENTED FLOW CYTOMETRY

Our end product was precise, fast, and simple. It enabled technicians to control sample concentrations, flow rates, the number of photons detected, the length of the experiment, and more – measured over a range of medical tests.

Further, the cytometer ensures high precision and sensitivity regardless of the rate of throughput. Even dilute samples can be acquired quickly without compromising data. Cell loss is minimized and sample preparation is simplified.

And because of that precision, the cytometer detects events faster than competing cytometers, achieving sample throughput at rates more than 10 times faster. Thanks to our thorough documentation for manufacturing and technical requirements, we were able to seamlessly hand off the design to the pilot production team.

LET'S KEEP INNOVATING.