

A Thermoformed Enclosure as Interesting as Instruments Inside

Tight Deadlines Met and Sleekness Added to “LaBella” Enclosure

Challenge – Transforming Industrial Box Housing into Sleek Platform for Innovative Diagnostic Testing

Ikonisys, a “leading provider of non-invasive, cell-based diagnostic solutions,” was enthusiastic about their new Ikoniscope® Digital Microscope System. The system automates the running of existing tests and makes rare-cell tests, which generally are not run because they would be too time-consuming, much more feasible. This detection technology could lead to early diagnosis and treatment for a variety of health issues.

The challenge was the industrial looking box that housed the unit and the control unit used to run it. “It looked like it belonged in a power plant, rather than in a medical lab,” stated Joseph Turgeon, VP of Operations for Ikonisys. To shake things up, the company decided to work with a designer and build the system in-house.

The design concept was radical and very different from what was typically seen in the medical industry. Based on the company’s ongoing development work for new tests involving women’s healthcare, the unit was given some curves and roundness reminiscent of the female form and named internally “LaBella.” The redesigned system now contained an enclosed LCD screen, image-processing software, a robotic handling apparatus for the slides, and the reagents used to run the test to identify abnormal cells.

The company was impressed with the new design approach but also concerned about quickly turning the concept into reality. A fast approaching trade show created even more urgency. The system would be presented to the industry, and, more important, to potential partners. At the time, the show was less than one month away.

Turgeon took the company’s concerns and designs to ThermoFab. “I knew ThermoFab would be able to do this in short order,” he stated, adding, “I had the opportunity to work with them on other occasions and didn’t hesitate to call them again.”





Result

Flawless product launch at industry show solidifies Ikonisys' place in industry.

"The very first prototype enclosure was produced at record speed and with relatively minor modification and was sent directly to the American Society of Human Genetics show in New Orleans. I can personally attest that it was the most interesting instrument enclosure at the show, and made a very favorable impression with many of the most influential people in our business sector," stated Turgeon.

Partnering with a local manufacturing company that delivers superior quality, fast turnaround, exceptional service, and in-house production capabilities saved Ikonisys time and money.

Solution – Sleek Design Dream A Reality While Meeting Tight Deadlines

ThermoFab quickly jumped into the project, and Turgeon was once again impressed with the attention he received: "In my experience this type of customer service and commitment is usually reserved for major players in an industry."

ThermoFab's expert designers and engineers worked closely with Ikonisys to develop the enclosure and to ensure not only that it looked sleek, but also that each piece went on the system consistently, smoothly, and seamlessly. ThermoFab's strength in design reviews, tooling, and painting – all done in-house – offered maximum quality control and eliminated the risk of delays, which would have been ruinous for Ikonisys' trade show schedule.

The fact that Ikonisys was initially looking to produce smaller quantities did not affect the project either, since ThermoFab operates on a lean manufacturing system. "ThermoFab was able to make things happen," added Turgeon.

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