

### Stanford Electronics, Manufacturing & Sales Application: Design, Fabrication of Medical Optical Devices

#### Stanford Electronics

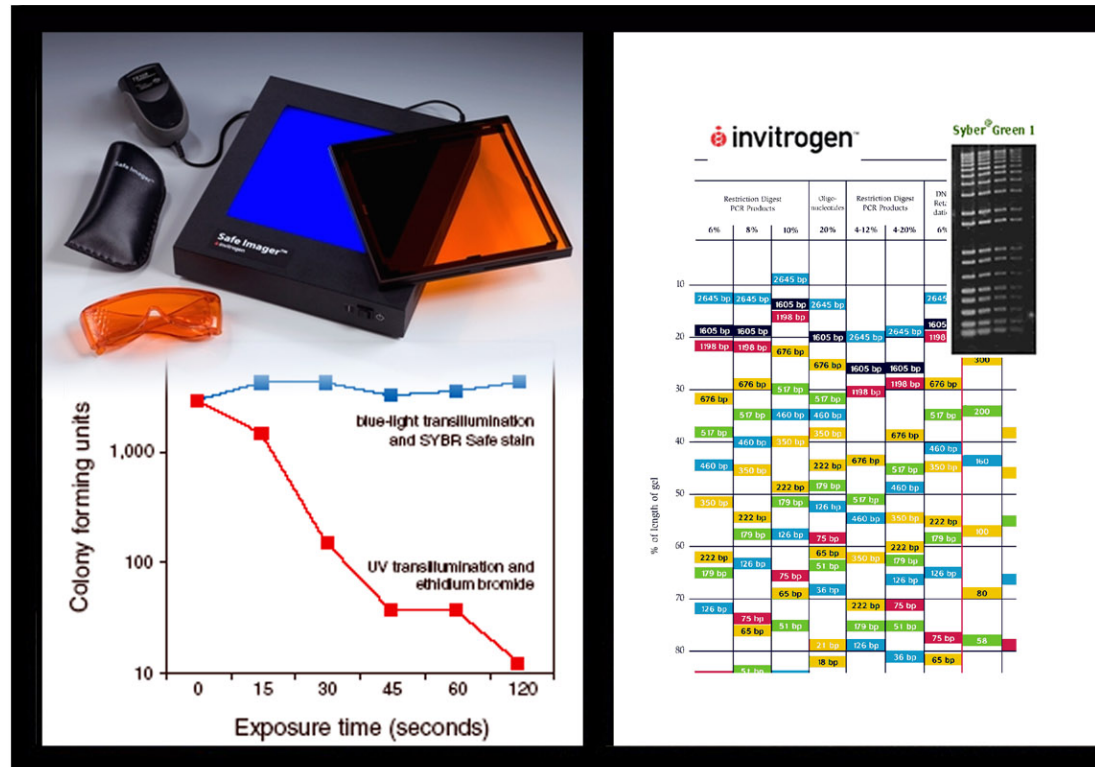
is one of a new breed of companies who leverage their own engineering & production expertise to help customers gain the advantage in a hyper competitive field of medical electronics.

“In the medical device market you have to have it all” says Ann Klieves –CEO and Founder. “It’s not enough just to be the lowest-cost producer or to make the highest quality product. Today, you’ve got to get to your market first, especially when your competitors are also world-class firms.”

The team really came through for Invitrogen’s Safe Imager.® “Our approach leveraged a special combination of optical quality glass and the superior optical and physical parameters we could only get from the highest grade of optical Acrylic material,” she adds.

**“We counted on the wealth of materials and fabrication expertise of Architectural Plastics.”**

Because they have done similar tough medical designs in the past, we knew they were the right partner. Time and again, they helped us solve the inevitable issues that crop up with new product development.”



During the design and initial fabrication of the Safe Imager®, the engineering team noticed an optical aberration– ‘Newton’s Rings’ –in the prototype.

The cause of the distortion was the contact between the layer of acrylic and the glass. API was able to eliminate part of the problem by adding a thin spacer between the glass and the acrylic panel, but there wasn’t enough space left in the enclosure to separate the other layers –rings were still visible between the white and transparent blue acrylic.

API suggested using a sandblasted surface on one of the surfaces to break the contact. It worked, and the rings were gone! **Do you have a tough design or fabrication challenge? Call us, we are always available to help with your fabrication and design needs!**