

### Laser processing creates more accurate, more convenient in vitro diagnostic test strip components that require smaller sample sizes.

In Vitro Diagnostic (IVD) test devices are defined as medical devices used for the analysis and examination of specimens like blood and tissue samples for the main purpose of providing information for diagnoses in a controlled environment outside of the patient. These in vitro diagnostic devices are typically designed to limit the amount of sample specimen required for an accurate analysis.

Expensive hard tooling is problematic for the creation of complex, multi-layer in vitro diagnostic components. LasX's LaserSharp® high-speed non-contact processing technology makes these intricate designs a reality.

Replace traditional methods for manufacturing test strip components with flexible laser processing. At LasX, we can manufacture complex in vitro diagnostic components in single-layer and multi-layer structures.

- Easily create single-layer spacer and gasket in vitro diagnostic components to seal flow channels and molded outer layer structures.
- Add fluidic channels and multi-layer electrode assemblies to your electrochemical devices with a combination of cutting, kiss-cutting, slitting and laser ablation with our precision lamination process.

If your IVDs incorporate intricate filter media, they're also good candidates for digital converting. LaserSharp technology gives you a non-contact method to process thin extensible materials and seal edges when necessary.

At LasX, we work closely with your design team from process conception to final production to capitalize on the advantages inherent in our LaserSharp conversion process. We'll help you maintain a robust process window and eliminate problems associated with using different technologies during design development.

LaserSharp digital converting gives you these advantages when compared to hard tooling:

- Repeatable features due to non-contact processing.
- Intricate shapes which are expensive or impossible to produce with conventional methods.
- Consistent processing of laminations that include adhesive layers.
- Consistent removal of slugs from the web.
- Rapid design changes.
- In-line inspection of critical in vitro diagnostic quality features.