# Precision Converting Services

## Quick Turn Components Delivered with Laser Precision

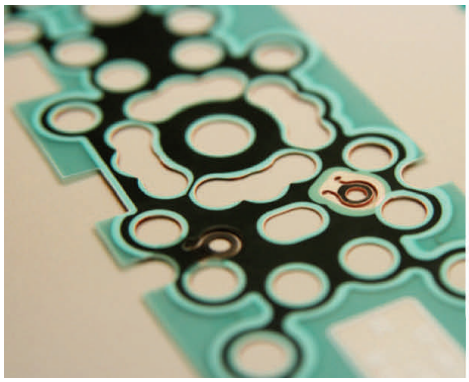
The ***Precision Converting Services*** team is a full service job shop offering laser converting capabilities for the industrial and electronic manufacturers. We'll help you to take full advantage of laser processing as a product manufacturing solution, eliminating the costs of expensive tooling, machine downtime, and delays for design changes. In addition to traditional job shop functions, we help develop the cost-effective processes required for your unique products.

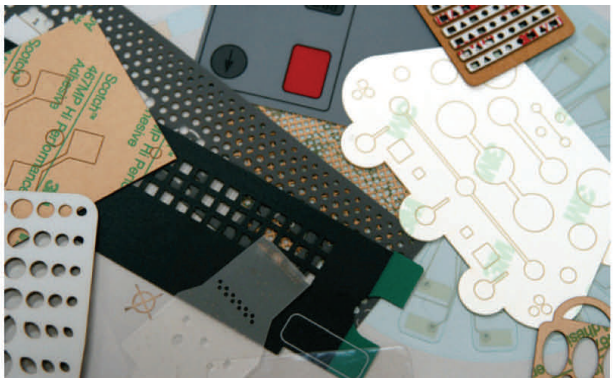
Our LaserSharp® laser converting processing method delivers precision and accuracy that traditional die cutting methods cannot match. Because lasers vaporize material, the risks of material contamination are greatly reduced and parts display smoothly contoured cuts and edges free from processing artifacts. Eliminate the design constraints of metal dies and achieve unique geometries and complex shapes using laser technology. The ***Precision Converting Services*** team specializes in laser solutions for applications including:

- **RFID antennas**
- **Flexible circuits**
- **Graphic overlays**
- **Membrane switch components**
- **Foams**
- **Gaskets**
- **Touch screens**
- **Abrasives**
- **Spacers**
- **Adhesives**

### Advantages:

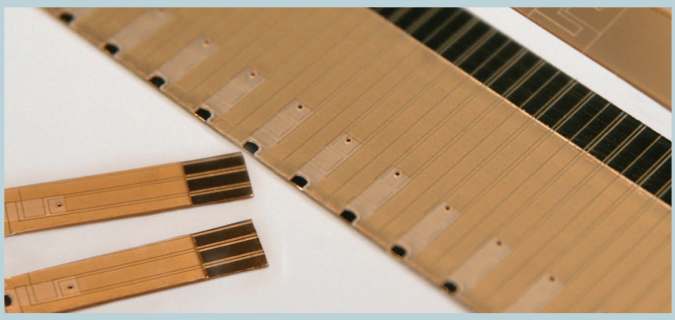
- No upfront tooling costs
- Multiple processes available in a single production run:
  - Laser cut
  - Laser ablate
  - Laser via hole drill
  - Laser kiss-cut
  - Laser score
  - Laser perforate
- Rapid turnaround due to digital technology
- Design revisions are simple and fast, ideal for prototyping
- Tolerances down to ±.002" (±50 µm) are achievable, depending on material and design
- Reduced material waste
- Cost-effective short runs of both roll and sheet fed materials
- Achieve complex, intricate shapes unachievable with metal dies





## Materials suitable for laser converting:

- Polyester
- Metalized films
- Thin polycarbonate
- Polypropylene
- Adhesives and adhesive tapes (VHB)
- Foams
- Rubber (silicone, EPDM)
- Teflon
- Cork
- Vinyl



## Superior Part Quality

***Precision Converting Services*** routinely produces parts with tolerances down to ±.002" (±50 µm). Our LaserSharp® technology uses a non-contact processing method, ensuring that even difficult to convert materials such as abrasives and adhesives are processed more accurately without the drawbacks associated with conventional tooling.

The laser converting process is able to control adhesive flow and build-up, resulting in increased part quality. Adhesive layers are cut at controlled depths and the downtime associated with cleaning adhesive buildup is eliminated. Additionally abrasive materials are often problematic to process as they quickly dull metal dies which must be replaced often. Conversely, our low maintenance LaserSharp® laser systems require no consumables.

## Quick Turn Prototyping

Digital laser converting technology offers flexibility ideal for the creation of prototypes. The cost and downtime associated with die production and storage is eliminated. In contrast, the laser converting process is completely digital and utilizes vector files to guide the processing of the laser. Therefore implementing design revisions is as quick and simple as importing or modifying a file or the file directly at the laser workstation. This process eliminates extensive production delays.

## Process Development

If your part or manufacturing requirements falls outside of traditional electronic and industrial applications, our experienced process development staff will work with you to tailor a laser converting solution to fit your unique requirements. We offer confidential process development and are committed to testing your materials using our precision laser converting technology. With no upfront tooling costs, fast turnaround, and the ability to respond rapidly to design changes, laser converting is an economical solution for short run orders, prototypes, and full-scale production.

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