DuPont engineering plastics and know-how can help you gain the benefits of laser welding in cost-effective assembly solutions.

**Key capabilities and benefits of laser welding include:**
- Assembly of sensitive parts.
  - No relative motion of parts being welded.
  - Little or no heating beyond the weld area.
- Excellent aesthetics: no visible scars or flash on exposed surfaces.
- High precision: tight control of relative part location.
- Wide latitude in molding related materials, e.g. PA66 to high-performance polyamide (HTN).
- Versatility: suitable for a wide range of part designs and sizes.
- Low cost: usually competitive with alternative welding methods, and sometimes less expensive.

**Application Ideas**

**Automotive:** Sensors, door lock and gearshift housings, headlights, taillights, fuel and air filters, fuel injectors, actuators, reservoirs for clutch and brake fluids.

**Electronics:** Instruments, keyless entry devices, connectors, housings, keyboards, mobile phones, watches.

**Microtechnology:** Biochips, pumps, motors, valves, manifolds, containers, test plates.

**Office equipment:** containers, cartridges for toner, ink, etc.

**Packaging:** sterile containers for pharmaceuticals or medical products, food packages.

**Medical products:** containers, syringes, connectors.

**Design idea:** rigid structural parts with flexible seals. Do it by welding Hytrel® thermoplastic polyester elastomer to Crastin® PBT thermoplastic polyester resin. Think how other hard-soft structures can be used in your products.
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