

TOPFLIGHT INNOVATIONS

Precision Converting

Topflight has a wide range of in-line rotary, flat bed punch, and laser converting options, capable of producing multi-layer laminations and clean cuts with full slug removal, no burrs, and no distortion. Components can be delivered in a sheet-and-stack, singulated, or roll format up to 20" in diameter.

Electronic web tension controls ensure precise registration with highly accurate and repeatable results, holding tolerances as tight as ± 0.001 " when using flat bed dies. Various materials can be converted, from thin films and laminates at thicknesses of 0.001", to open and closed cell foams reaching thicknesses of 0.2", along with adhesives, membranes, conductive materials, woven or non-wovens, papers, plastics, gels, and rubbers.

Completely modular equipment allows for rapidly interchangeable station configurations with widths up to 13". Standard die-to-die registration is ± 0.008 ", with tolerances as low as ± 0.001 " on some materials. Maximum part length is 15" with hard tooling and up to 60" using laser tiling.

The in-line laser system can cut, kiss cut, channel, score, drill, perforate, or ablate very intricate designs and delicate materials without the need to purchase tooling. Because the depth and repeatability of the laser cut can be accurately controlled, highly precise scoring is possible.

Laser cutting can produce .040" slots and .010" diameters when the smallest features are required. Laser cuts are clean, producing edges that are clear of material strands. And, the ability to tightly nest shapes limits scrap.

Other capabilities such as printing (flexographic, screen, letterpress, digital), island placement, hot-stamping, laminating, printed conductives, tactile surfaces, folding, or variable information processing can be combined with die cutting to create a fully assembled part.



Flexible, die-cut parts can serve functions such as gaskets, spacers, shields, insulators, and filters.



Topflight-engineered and Preco presses convert components and sub-assemblies for printed electronics circuits with vias, RFID, patches, dressings, diagnostic assays, test strips, and sensors.