



ADVANCED GREEN TAPE PROCESSING EQUIPMENT

Credence Engineering is an experienced manufacturer of advanced green tape processing equipment with over 25 years of equipment design experience and 14 years at a high volume medical HTCC producer making equipment to meet volume and yield requirements.

KEY PRODUCTS

- **Caster Thickness Controls**



- Slurry Reservoirs which have proprietary Spreader Valve which spread the introduction slurry laterally so perfectly that there are no influx waves to influence the casting head pressure.
- Thickness Measurement Systems that use a laser measurement technology that is color insensitive and accurate to sub-micron resolution.
- Slurry Level Control System that will maintain the slurry level in our reservoirs to within .010" and even tighter depending on the specific setup.

- **High speed via punching**



- 20 vias per seconds up to 300 vias per second
- Up down sensors to minimize punch breakage
- "Drop-In" tooling changeover that takes as little as 1 minute to change out a complete set of tooling.

- **Printing**



- Fine line, down to 3 mil lines and spaces with our "Bridge" frames
- Advanced Screen Stretching – consistent tension throughout the entire stretch
- Bottom loading of screen frame to eliminate snap off adjustments
- Automatic printer adjustment utilizing a special measurement system

Also upgrades for manual MPM & AMI Printers

- **Bar/Block Cutting**

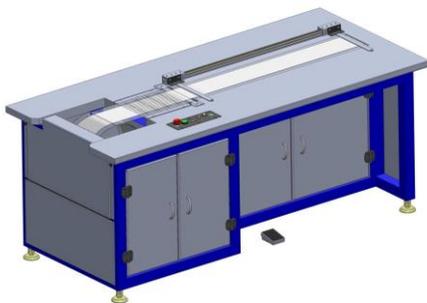


- LTCC/HTCC cutters - Single (1) camera with an additional axis (X-Axis) so that we use the same camera to view some or all of the Fiducials. We X and Y Corrections to "Center" the parallel pair of cuts to "Best Fit" the Fiducials and we "Hold" the overall part size. This approach eliminates trapezoidal parts that a capacitor cutter produces.
- Capacitor Cutters (shown) - Two (2) cameras to correct the rotational position of each cut so as to align the cut with the exposed metal on the edges of the laminated block.

- **Isostatic Pressing**

- Compact and large capacity up to 24 inch diameter.

- **Other Products & Services**



- Small Foot Print Tape Drying Cabinets
- Pressure Via Fill – superior via fill, fill high aspect ratio vias, less bleed-out, less than a minute changeover, eliminates tying-up an expensive printer
- Carousel Tape Dispensing System to eliminate sequences problems associated with manual stacking
- Tape slitters
- Tape stripping/Inspection Tables
- Special Process evaluation for recommendations on areas for improvement.
- Out of Parallel Compensating Pistons for axial presses
- Used Equipment refurbishing, especially PTC machines.

Please feel free to contact us to discuss your needs and if we cannot offer you an economical and advanced system we will help point you in the right direction