CENTERLINE

Laser Machining

Centerline Technologies offers laser machining as a service to our lapping and polishing customers to size their jobs according to the requirements needed. Substrates can be laser drilled, scribed or cut to customer specifications.

Tolerances for Ceramic and Aluminum Nitride

- Scribed edge to scribe lines, +/- .003 cut outs or hole center
- Cut edge or alignment flats +/- .001 to scribe line, holes or cut features
- Internal features to other features +/- .001 or scribe lines
- Hole Diameter with pin gage +/- .001 (go/no-go)
- Hole Taper:
 .002-.030 thick .002
 .031-.045 thick .003
 .046-.100 thick .004
- Scribe Depth:
 .005-.030 thick 40% of thickness
 .031-.100 thick 45-50% of thickness
- Pulse Spacing:
 .005-.030 thick .003-.007
 .031-.100 thick .005-.009

Notes:

- 1. A minimum border of five times the thickness should be left between a scribed edge to be broken and an As Fired edge of the plate.
- 2. Sharp corners should be radius to reduce stress induced cracking.
- 3. No two machined features should have edges closer than one material thickness to the other.
- 4. Tighter tolerances can be achieved upon request
- 5. All tolerances are in inches
- 6. Tolerances are non-cumulative