

Centerline Technologies uses free abrasive lapping processes that are used to provide flatness, parallelism, thickness identity, and surface finishes to extremely demanding tolerances.

Lapping is a free abrasive machining process. An abrasive (various compounds) in slurry is applied to a lap. The work part is placed on top of the lap in fixtures and both lap and work plates are moving. This creates the cutting action/material removal at a controlled rate. Using various methods and unique processes Centerline can finish pieces without introducing stresses and heat damage associated with other processes such as grinding.

The selection of abrasive, pressure, speed of machine and shape of ones lap all play a critical roll in the outcome of your finished product. Using SPC processes, the controls at Centerline Technologies will provide you with a repeatable product from one lot to the next, again and again, time after time.

Here at Centerline Technologies we use single and double sided lapping, and you can be assured that we will recommend what will benefit your product, to provide the highest quality at the most economical rate.

Material	Surface Finish (u-inches)	Thickness Tolerance	Applications
As fired 99.6% Alumina	< 4	+/-10% or +/-5%	Use for low to medium power DC & Rf circuits
Lapped 99.6% Alumina	10 u-in nominal	+/-0.0005"	Use for low to medium power Rf & Microwave circuits
Lapped 99.5% Beryllium Oxide	20-30 u-in	+/-0.0005"	Use for high power DC/RF/ microwave circuits
Lapped Aluminum Nitride	12 u-in nominal	+/-0.0005"	Use for high power DC/RF/ microwave circuits
Lapped Fused Silica	10u-in nominal matte finish	+/-0.0005"	Use for high frequency circuits requiring extremely low loss performance
Lapped Titanates	15-30u-in	+/-0.0005"	RF & microwave circuits requiring high Q

Centerline Technologies takes great pride in producing a superior product consistently and repeatedly. Please review our capabilities and polishing and lapping information. Talk to us. Ask questions. Find out why Centerline Technologies should be your preferred source for high quality polished and lapped substrate materials.