Services & Capabilities

- Lapping
- Polishing
- Edge Polishing
- Dicing
- Grinding
- Shaping
- Wafering

Fused Silica: 1"x 1" and 1" x 2" x .006" thick, polished b/s
Aluminum Nitride: 1" sq. and 2" sq. x .025" thick, polished b/s
96% Alumina: 1"sq.-4" sq. x .004" thick, fine lapped b/s
R-Plane Sapphire: 100 mm dia. X .5 mm thick, polished 1 side

Materials

- Fused Silica
- Aluminum Nitride
- Glass
- Quartz
- Pyrex
- 99.6% & 96% Alumina
- Sapphire
- Float Glass
- Lithium Niobate
- BK7
- B270
- 1737
- 7070
- UV&IR Materials
- Ceramics
- Filter Glass
- Metals
- Silicon
- Crystals
- Borosilicates
- PZT
- PLZT
- Soda Lime
- Ferrites
- GaP, GaAs, GaN
- PLUS MANY OTHER MATERIALS

Services & Capabilities

EDGE & ANGLE POLISHING
- Optically polished flat edges and angled edges
- Minimal edge chipping < 1 micron
- Edge faces/lengths
- Single side or opposing edges
- LiN, SiO2, Si, LiTa03
- Sapphire

<10/5 scratch/dig or 1 Ang
- Chips less than 1 micron
- Precision lapping up to 48"
- Dicing as small as .005" sq
- Thickness tol. ± .1 micron
- Parallelism to .1 micron
- 1/20 Wave flatness
- Precision Machining
- Low kerf wafering

Now Serving Silicon Valley

Flat Optics ● Dicing ● Wafers

Now Serving Silicon Valley

Flat Optics

Dicing

Wafers

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In Stock NOW
Valley Design, offers increased capacity in advanced high-speed CNC dicing, cutting and sawing, enabling us to provide a complete spectrum of shapes and materials to suit any application.

**Precision Dicing Services** are provided by Valley Design from the R&D phase through to high volume production requirements. Our dicing saws are fully programmable and are equipped with microscope and video for precision alignment.

Over the past 25 years, we have routinely processed customer or Valley supplied materials up to 8” (200 mm) diameter, and even larger by special request. Valley dices not only standard types of materials, but will also develop dicing/cutting procedures for untried materials. We have worked with all types of Glass, Fused Silica, Crystals, Quartz, Aluminas, Silicon, Aluminum Nitride, Lithium Niobate, Ferrites and Ceramics, as well as delicate compound semiconductors such as GaN and InP.

Depending on the material, the dicing kerf may be as small as 20 microns, and die size as small as .005” (125 microns).

We also have extensive experience in working with coated/patterned/circuited substrates and wafers, taking special care in protecting these surfaces.

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**Call Us With Your Specifications**
831.420.0595

**THICK**

WAFERS & SUBSTRATES

Minimal Chipping
>.250” Thick Fused Silica, Glass
>.120” Thick Sapphire, Ceramics
Photolithography Plates

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**GANG SAW Capabilities**

- Multiple Blades per pass for Production Dicing

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**Patterned Wafers**

- Patterned Optics
- Optically Coated Wafers
- Slotted Heat Sinks
- Step and Repeat Slots/Steps
- V-Grooves