

# CORNING

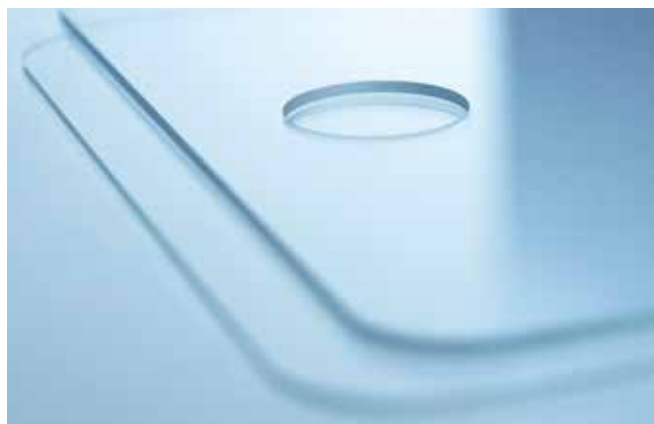


## Corning Laser Technologies

### Nobody knows strengthened glass like we do

No one knows better than Corning how to process Corning® Gorilla® Glass.

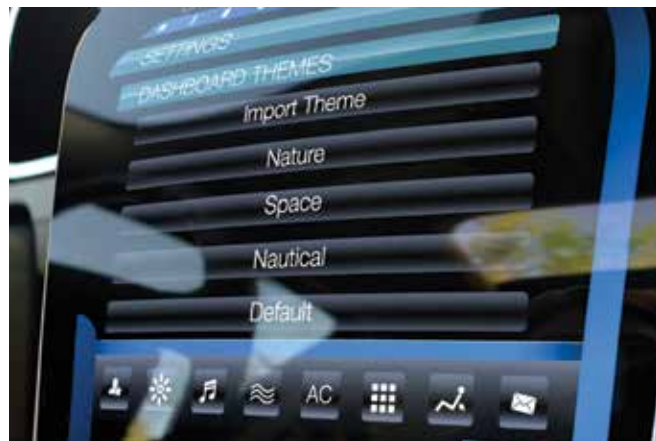
The Corning Laser Technologies systems are developed in close cooperation with the specialists at Corning, the world's leading innovators in specialty glass. This material science expertise adds unique advantages to the laser glass cutting process.



### Superior Technology

Corning's material science and optic capabilities add unique advantages to the laser glass cutting process. It offers not only distinct advantages over conventional cutting processes, but also over other laser cutting systems. Using ultra-short laser pulses, the material is cut by material disassociation rather than ablation. The result is a very low surface roughness, increased as-cut bend strength and faster throughput.

The Corning laser process enables cutting fully strengthened glass, un-strengthened glass, as well as other transparent glass and crystalline materials.



### The laser tool for your creativity

You have the creativity, we have the tools. With Corning's advanced glass cutting solutions you can start to literally think out of the box: Complex shapes – greater freedom for your design ideas.

Now you can design speciality glass like never before. Cut holes, radius form factors, complex geometries, vias, blind holes, slots and more.

- Adapt the shape of touch screens to your design, not vice versa.
- Use Corning® Gorilla® Glass instead of conventional soda-lime to save weight.
- Add high value glass parts for a premium feel of your products.
- Integrate buttons or loudspeakers into the glass panel.
- Use your creative imagination to develop innovative applications.

# Key Benefits



- Cuts functional multi-layer stacks
- Cuts glass from <math>< 50\mu\text{m}</math> up to 3.5mm thickness
- Eliminates fluids and tooling required in traditional processing methods

## Smooth Edges

The 'as cut' edge roughness may eliminate or reduce post-processing time and cost.

## High Break Strength

The 'as-cut' edge demonstrates superior break strength over other laser and conventional glass cutting processes as measured by 3pt and 4pt bend tests.

## Maximized material utilization

Near net shape cutting, nesting and glass size optimization of strengthened material with high CT levels minimizes material loss, thus increasing the glass material utilization.

## Applications

Advanced laser machining systems for glass processing:

Cutting of Glass Substrates

- Display technologies
- Coated substrates
- Sandwich applications
- Cutting "thin" substrates

Separation of Strengthened Glass

- Cover glasses of mobile devices
- Cover glasses of tablet PC's
- Camera protection glasses

Drilling of Through Holes in Glass Substrates

- Mobile Devices (camera aperture, home button, loudspeaker, etc.)
- Electronic components
- Tablet PC's and computers

# Laser Machines

The machine solutions are 24/7 proven and fully automated, offering high machine uptime.



The CLT 45G Platform is designed for fully automated production up to GEN 4.5 size.



The CLT 60G is a dedicated production machine up to GEN 6 size. Optional automation can be customized for optimum throughput. All machines are engineered, manufactured and tested in Germany.

## Your Solution

Our application lab will work with you to provide a complete solution tailored to your specific requirements. An extensive base of state of the art tools includes a wide variety of laser sources and extensive optical, electrical, and mechanical metrology equipment for application development.

# CORNING

For more information:

Tel: +49 89 / 899 48 28-0

E-Mail: [CLT-info@corning.com](mailto:CLT-info@corning.com)

[www.corning.com/lasertechnologies](http://www.corning.com/lasertechnologies)

© 2015 Corning Incorporated. All Rights Reserved.

Corning is a registered trademark of Corning Incorporated, Corning, NY. Corning Incorporated. One Riverfront Plaza, Corning, NY 14831-0001