

CORNING

EPIC  
Laser Micromachining

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Manufacturing, Technology & Engineering  
Laser Processing and Engineering

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Founded:

**1851**

Headquarters:

**Corning, New York**

Employees:

**~50,000 worldwide**

2021 Core Sales:

**\$14.1 billion** (at rate of 107 ¥/\$)

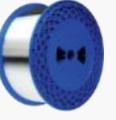
Fortune 500 Ranking (2021):

**263**

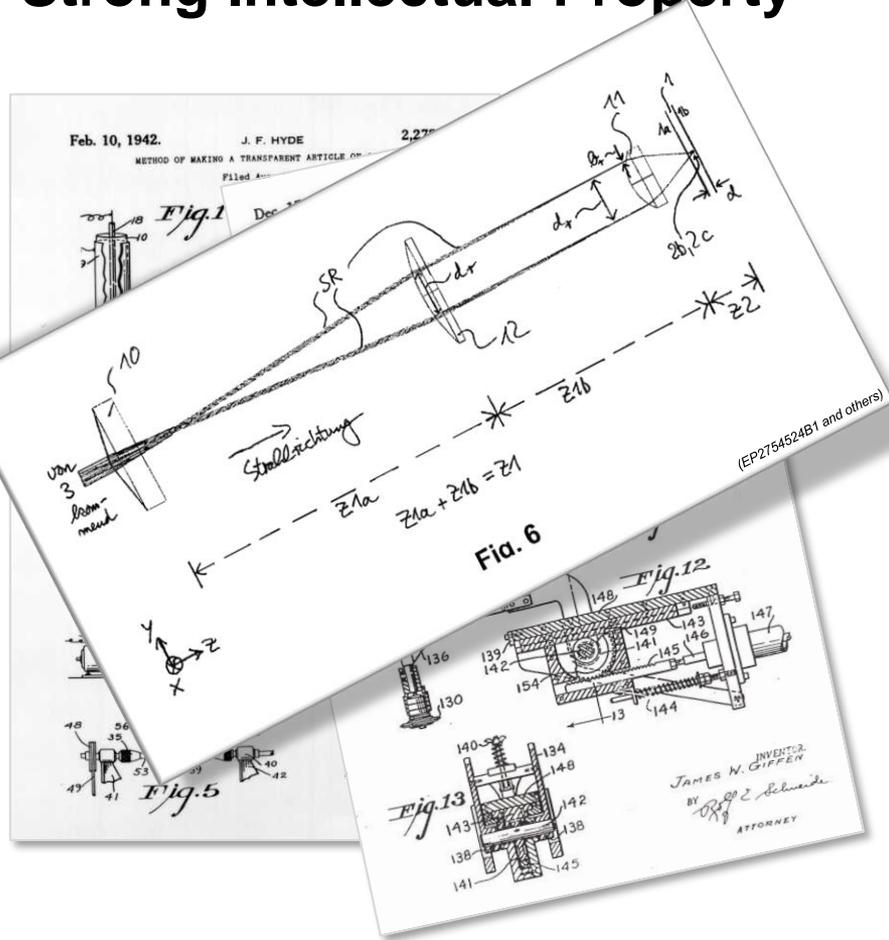
Corning Incorporated is one of the world's leading innovators in materials science. For 170 years, Corning has applied its unparalleled expertise in glass science, ceramic science, and optical physics to develop products and processes that have transformed industries and enhanced people's lives.

# 170 Years of Experience

## Corning has a proven track record of industry-shaping innovations

<b>1877</b> Railroad Signal Lenses 	<b>1879</b> Glass Bulb for Edison's Electric Light 	<b>1908</b> Colored Railroad Lenses 	<b>1915</b> Heat-Resistant PYREX® Glass 	<b>1934</b> HPFS® High-Purity Fused Silica 	<b>Silicones</b> 	<b>1935</b> Hale Telescope Mirror 	<b>1939</b> Television Picture Tube 	<b>1952</b> Glass-Ceramics 	<b>1961</b> Spacecraft Window Glass 	<b>1964</b> Fusion Overflow Process 	<b>1970</b> Low-Loss Optical Fiber 	<b>1972</b> Ceramic Substrates for Catalytic Converters 	<b>1982</b> Liquid Crystal Display Glass 	<b>1990</b> Hubble Telescope Features ULE Mirrors 
<b>2000</b> Low-Density LCD Glass 	<b>2001</b> Tropel® Metrology Instruments Acquired 	<b>2003</b> ULE optimized for EUV processes 	<b>2007</b> Corning® Gorilla® Glass Wafer-Level Capping introduced 	<b>Ultra-Bendable Optical Fiber</b> 	<b>2012</b> Ultra-Slim Flexible Glass 	<b>2013</b> Laser Glass-Processing Capabilities acquired 	<b>2015</b> Hyperspectral Technologies acquired 	<b>Light, Tough Automotive Glass</b> 	<b>2016</b> Launch and Introduction of solutions for Augmented Reality 	<b>Gasoline Particulate Filters</b> 	<b>2017</b> Diffractive Optical Element (DOE) 	<b>Glass wafers for FEOL and mobile 3D sensing applications</b> 	<b>2019</b> Advanced Packaging Carriers launch for denser chip packages 	

# Strong Intellectual Property



In 2020, Corning was granted

~**480** patents in the U.S.

>**1,600** patents in countries outside the U.S.

At the end of 2020, Corning and its wholly-owned subsidiaries owned

>**11,500** unexpired patents

Including the ‘bessel beam’ fundamentals for Corning’s glass cutting technology

# Laser Processing Sites at Corning

## MTE Laser Processing & Engineering / AO Corning Laser Technologies

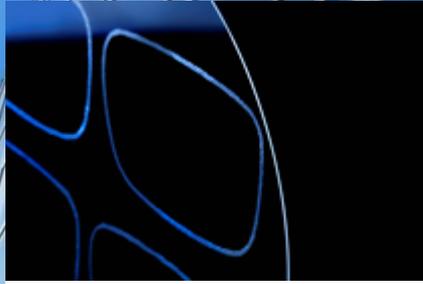
*Advanced Optics Locations*

Site Number	Location
1	Corning Headquarters, Corning, NY
2	Sullivan Park Research Center, Corning, NY
3	Fairport, NY
4	Canton, NY
5	Bagneaux, France
6	Wiesbaden, Germany
7	Fuzhou, China
8	Shanghai, China
9	Hefei, China
10	Corning Technology Center - Silicon Valley, Sunnyvale, CA
11	Harrodsburg, KY
12	Krailling, Germany
13	Beijing, China
14	Tainan, Taiwan
15	Avon, France
16	Taipei, Taiwan
17	Corning Advanced Technology Center, Taipei, Taiwan
18	Lyon, France
19	Keene, NH
20	Phoenix, AZ

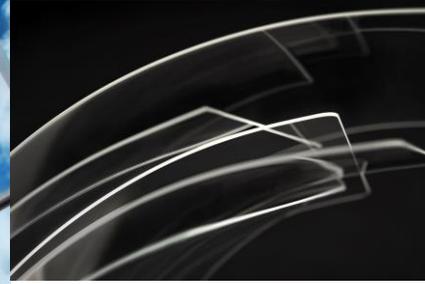
# Advancements for application of laser glass cutting in different applications



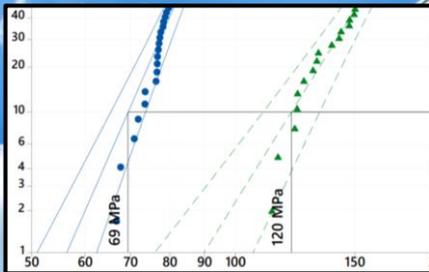
Large glass sheets (up to Gen8)



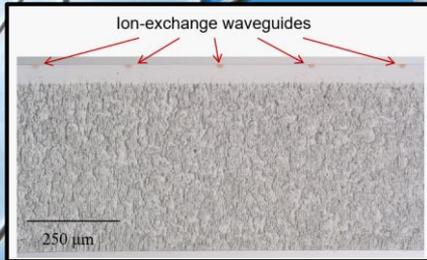
Freeform cutting of glass wafer



3D formed glass



High edge strength

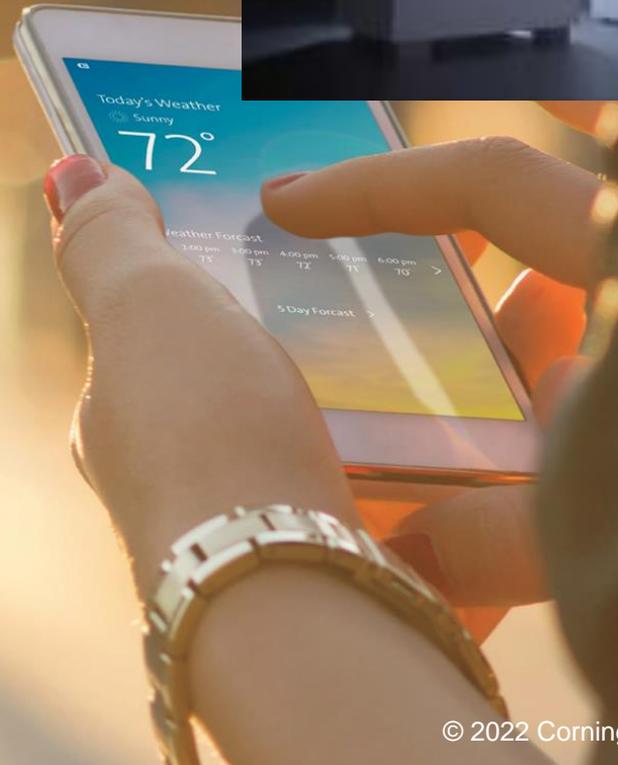
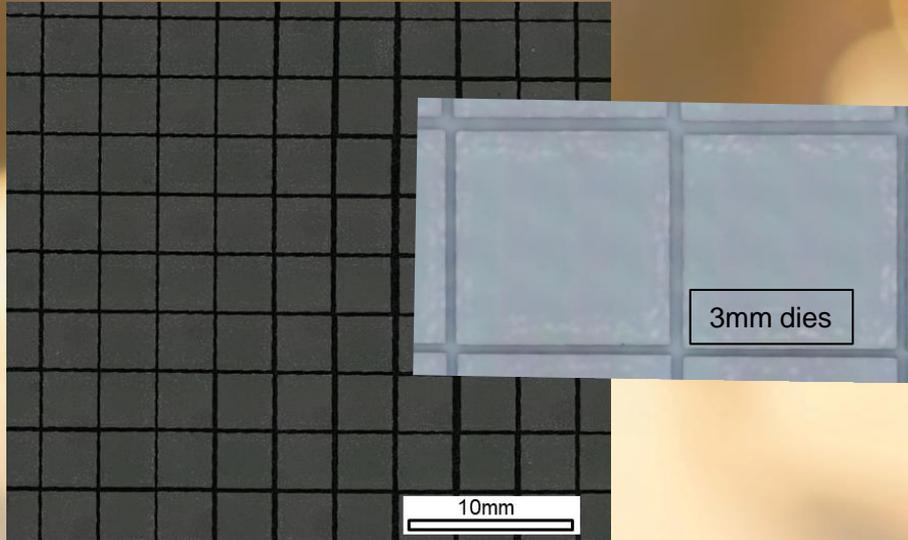


Structured end facets



Thick glass (up to ~7mm)

# Emerging field: laser dicing for glass based micro-components



# CORNING



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

For more information on  
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our booth at Glasstec/Duesseldorf  
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