

Dynatex DTX-200 by CLT

Glass Separation Processing with StreetSmart Breaker

For over 170 years, Corning has applied its unparalleled expertise in glass science, ceramic science, and optical physics. Now, Corning Laser Technologies (CLT) is leveraging 20-plus years of experience in precision laser machining with Dynatex International's 60 years expertise in die singulation.

CLT's unique nanoPerforation technology provides a modification trace through the entire thickness of glass (0.1mm to 2.0mm) in a single pass and allows for subsequent high-quality breaks with the DTX-200. The CLT 400S-WD is a dedicated tool for the nanoPerforation of glass wafers at unparalleled speeds (up to 500mm/s).

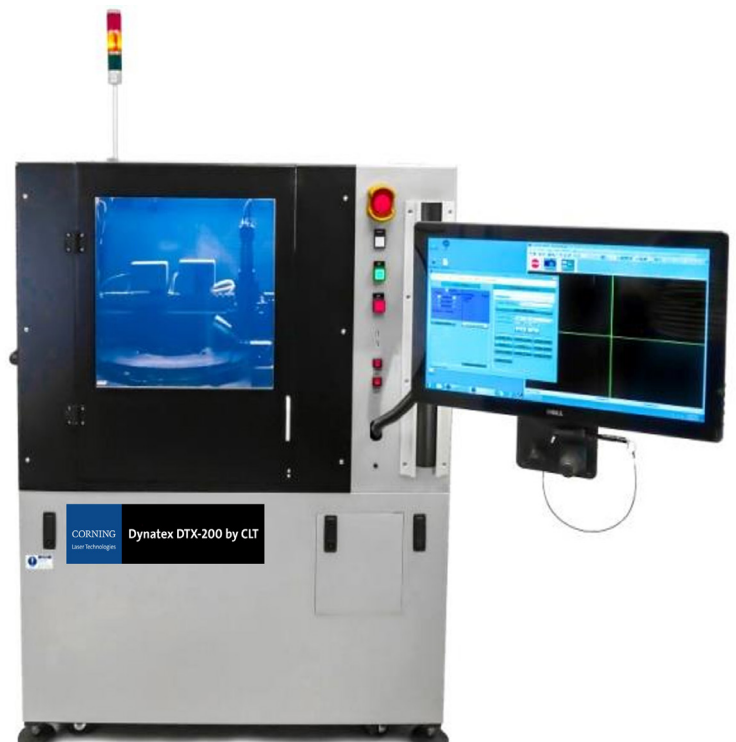
Functionalities:

- Industries using glass substrates for producing small scale devices are adopting semiconductor-like practices to gain scalability, quality control, and repeatability of device performance
- Die separation of a pre-scribed glass panel is quick, clean and repeatable
- Scalable process for ramping up production while maintain die quality
- After precise laser pre-scribing of the glass panel, resulting die edges are smooth, straight, and chip-free

Glass substrate material:

- Borosilicate glass
- Fused silica
- Single & stacked glass

Glass Die After Separation:



Separation at intersection



Separation axis 1



Separation axis 2

Benefits of StreetSmart Glass Separation:

- For high volume production, maintain in-house control of glass device processing:
 - o The Dynatex DTX-200 by CLT StreetSmart Breaker processes coated and non-coated glass
 - Separate glass panels before OR after applying a sensitive coating
 - No contact at the sensitive or active area of devices
 - o Consistent, repeatable process yields high volume production as demand increases
- For use in R&D AND pilot production of glass based biomedical devices:
 - o No more hand breaking of glass yields smooth, straight edges for more consistent results, reducing staff time to drive decreased production cost and increased efficiency
 - o The separation process is highly scalable, allowing seamless switching between large-scale production and R&D

System Specifications:

Power Required	100/120 VAC 20 amp OR 220/240 VAC 10 amp 50/60 Hz
Operating Temperature	60-80° F (15-27° C), 40-60% relative humidity
Height	1981mm (78 in)
Width	1477 mm (57 in)
Depth	1270 mm (50 in)
Chuck/Capacity	Up to 200 mm square or round wafer size
Break Time	~0.75 to 1.5 seconds per/break

CORNING
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