

# Glass Cutter

## High Precision Glass Cutter



Experimenters who make their own electrodes can benefit from the Glass Cutter. This high-precision glass cutter can cut and trim substrates with ease. Suitable for ultra thin [0.5 mm] to thin [4 mm] TCO substrates.

This Glass Cutter features a unique and durable notched carbide wheel that provides very precise cuts with smooth edges.



### Characteristics

Shaft Length	15.7 cm
Wheel	carbide, notched
Suitable For	0.5-4 mm thick glass



Regular cutting wheel  
on other glass cutting tools



Notched cutting wheel  
on this Glass Cutter

### Reference

ref. 65211 [1 pc.]

Pricing on product page:  
[solx.ch/glasscut](http://solx.ch/glasscut)

### Best Used With

Our 1-3 mm thick substrates, such as the following FTO-coated glasses:

- TC022-7
- TC022-15
- TC030-8
- TC030-10/LI
- TC010-10

These substrates are available in different sizes and quantities with no minimal order.

### How to Order

Please visit our webshop at [shop.solaronix.com](http://shop.solaronix.com), or send us an e-mail or fax indicating your desired products.

## USAGE

Cutting glass substrates with the Glass Cutter begins by scribing a straight line or curve on one side of the glass in the position of the desired cut. The scribe makes a fissure on the surface of the glass and when pressure is applied the remaining thickness of the glass breaks along the scribed fissure.

Thanks to the notched design of the cutting wheel, this crack is up to 90% of the thickness of the glass, which facilitates a lot the breaking step and reduces chances of rejects.

Here are the essential advises to make successful cuts with our Glass Cutter.

### Prepare the Glass for Cutting

Carefully clean the surface of the glass to be scribed. Even the smallest dust particles can interrupt the cut, which can cause an uncontrolled break. Very cold or very hot glass is more difficult to scribe and break. Allow such glasses enough time to reach room temperature prior to cutting.

While the use of a cutting lubricant is usually recommended, the Glass Cutter will work just as well without oil when cutting thin glass substrates (<4 mm).

*The FTO-coated substrates supplied by Solaronix can be scribed on the conductive side. This is particularly useful for cutting substrates that have functional layers on the FTO coating.*

### Scribe With Your Full Body

Firmly hold the substrate in place and make a scribe where you wish to cut the glass. Make the scribe almost the entire length, but be careful not to go off the edge of the glass.



Start and stop about 1-2 mm from the edges. position your scribe so that there is an equal amount o

If possible, glass on each side of the cut. Hold the Glass Cutter at an angle of approximately 50° to the surface, as indicated by the shape of pen tip. The cutting wheel itself should be upright, perpendicular to the glass.

*The notched will allows to make a good scribe with a low to normal pressure. You may want to apply a lower pressure than you used to with other glass cutting tools.*

While scribing, do your best to apply an even pressure and maintain a uniform speed. Listen for a smooth consistent sound as you scribe. The sound shouldn't be scratchy, it should sound like a smooth and quiet zipper. It will require practice but the scribe is made best with a smooth and continuous motion.

Never scribe the same path twice. This will cause an uncontrolled or jagged cut.

### Break the Glass

Break the glass along the scribe immediately after scribing. Glass has the ability to partly heal a fissure over time, making the scribe too shallow or discontinuous for an efficient cut. Remember it not possible to scribe the same path more than once.

Hold the glass with your thumbs on each side of the line with the scribe facing up. Apply pressure as if your were to bend the glass away from the scribe. The glass should break along the scribe with a moderate force. If the glass does not break easily do not force it, this will result in a uncontrolled break and possibly dangerous shattering.

For the cleanest cut, we recommend using a foam pad to break the glass. Place the freshly scored glass on a 2-4 mm thick foam pad, scribe up, and press down firmly on both ends until the glass breaks.

## STORAGE AND SAFETY

### Storage

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Place the Glass Cutter in its box after use for a safe storage. Protect the cutting wheel from impacts extend its lifetime.

### Safety

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Glass should be handled by, or under the supervision of trained personnel. Glass edges can be very sharp and cause injury. Glass chips may become airborne during manipulation. Wear the suitable protective gear such as gloves and safety goggles.



Material Safety Datasheet (MSDS) are available for the glass substrates supplied by Soloronix.

[soloronix.com/msds/](http://soloronix.com/msds/)

## RELATED PRODUCTS

This glass cutter is suitable for 1–3 mm thick substrates, such as the following FTO-coated glasses supplied by Soloronix:

- TC022-7, 2.2 mm thick, 7 ohm/sq, sodalime.
- TC022-7/LI, 2.2 mm thick, 7 ohm/sq, low iron sodalime.
- TC022-15, 2.2 mm thick, 15 ohm/sq, sodalime.
- TC030-8, 3 mm thick, 8 ohm/sq, sodalime.
- TC030-10 3 mm thick, 10 ohm/sq, sodalime.
- TC030-10/LI, 3 mm thick, 10 ohm/sq, low iron sodalime.
- TC010-10, 1 mm thick, 10 ohm/sq, aluminoborosilicate.



### Find Out More

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Visit the Glass Cutter product page for more information:

[solx.ch/glasscut](http://solx.ch/glasscut)

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### Feedback

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