## Cutting explanation for thin glass

## Moving

- Move it as little as possible. I'd recommend putting on a rack, and moving the rack to wherever you need. We pack 0.7mm jumbos (3m x 6m), but they never come off the stillage rack we pack on. Everything in our downstream system is set up to take this rack.
- Stiffening lite We use a piece of 6mm in the front and the back of the pack to stabilize. This makes it easier to ship and move.
- Horizontal move We use a thin piece of plywood or plastic to help carry a large plate from the cutting table.
- Gravity drop still works well, but does take some getting used to in watching. Separating the lites should take more care as well, because it is really easy to peel multiple lites.

## Set up

- Solid wood table (1 ½" thick) covered with felt. I'd say metal table would work or a plywood cover we could drop on our current table. I'd buy a sheet of ¾" birch and add some felt paper and that should work. I think the hard surface made a big difference.
- Sample prep picked up samples vertically, air dropped onto the table. Done for all thicknesses. Not sure how comfortable you feel on this, but it was no issue in practice. Pick up from top, set down on top of table, let it fall away from you. Gravity drop worked great.
- I'd say some of the magic is here in the table. I think it is tough to get a good scribe on a soft table.

# Cutting

- Used the special cutters from Maizuru. One for 0.7mm and the other is for <0.4mm.
- Used a standard wood T square to scribe.
- Run the cutter against something to make sure the oil is flowing before you cut.
- Pressure was light, but not significantly different than say cutting 2.0mm. Basically, push down on the head until the cutting head compresses into the shaft to engage oil flow. Otherwise, light pressure was fine. I didn't get too scientific on this and had no issues. Again, I think the table makes a big difference.
- I cut down a 49 x 43" into 6 squares roughly 17 x 25"
- I did all scores at one time first cross score towards me, then two scores across the table.

#### Snapping

- Real trick was here. Pull the glass out ~3-4 inches past edge of table. Put your hand under the main cross score. Place your other hand on top of your bottom hand. Keep even pressure on both sides of the score. Lift up and kind of pop the glass, using your hands to run the score back. I had one not follow the score, but the other did no problem.

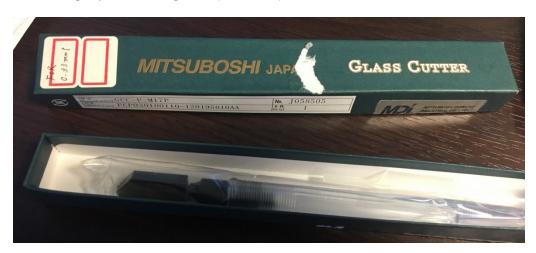
- Splits Pull the score to the edge of the table. Lift up on both sides and snap the glass on the edge of the table. This was just like I used to snap automotive we ran online. Lifted up about an inch of the front of the table and easy snap down on the table. Worked great.
  - For 0.3mm, pull the glass a bit past the edge of the table. To snap, hold the glass on the table with one hand and lightly snap down with the other hand.

# Example pictures

- Shows a sheet of glass cut into smaller pieces.
- Hand placement shows how you would snap or run a score.

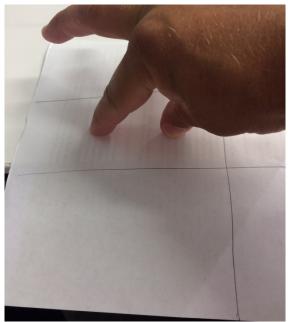
# **Cutting heads**

- Nothing super special here, but keys;
- Oil reservoir
- Spring loaded head
- Slightly lower rating head (134 v 144)

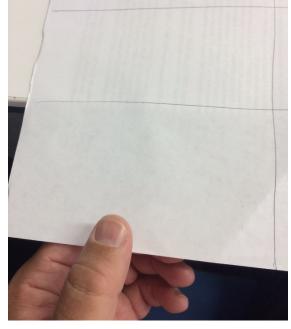




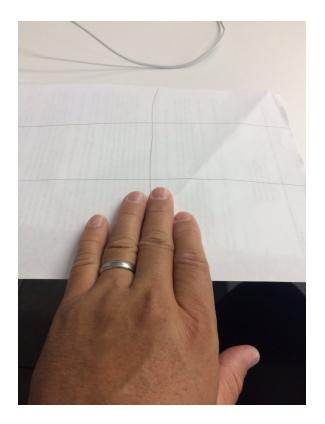




Picture - Spanning thin glass (Example - how to hold your bottom hand when snapping)



Picture – How to hold your hand on the top of the glass when running a score vertically up the sheet –



Picture – How to hold your bottom hand when running a score up the sheet

