

Procedure to cut and clean straw tubes.

GlueX-doc: 1624

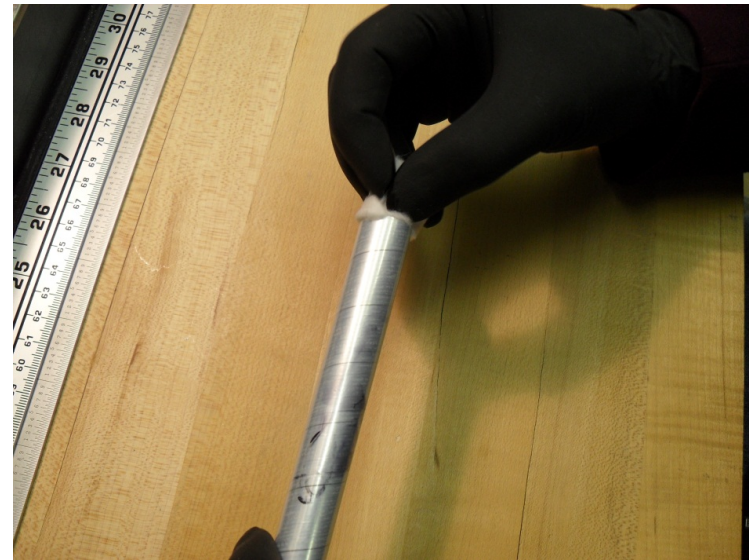
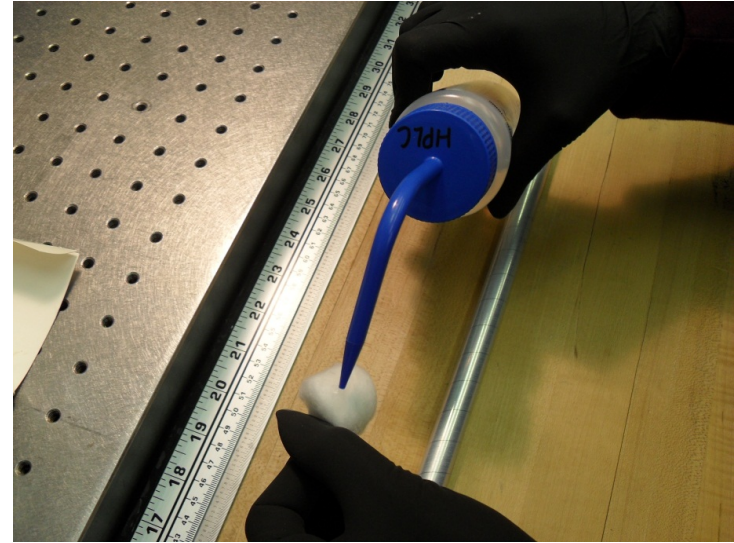
Modified: 13 Oct. 2010

General Procedures: This work is carried out in the preparation room outside of the clean room. All work is to be performed wearing latex gloves. Under no circumstances should the straws be handled with ungloved hands. All straws have already been checked according to the procedures in GlueX-doc: 1532. **The cutting procedure is to be carried out wearing eye protection.**

Training Procedure: New personnel will be shown the posters describing the cutting and cleaning process. They will then observe the process carried out by a trained person. Under supervision, they will repeat the process for five straws. If the work is satisfactory, they will be considered trained. All work occurs in the preparation room which has a limited capacity. No written documentation of trained personnel is maintained.

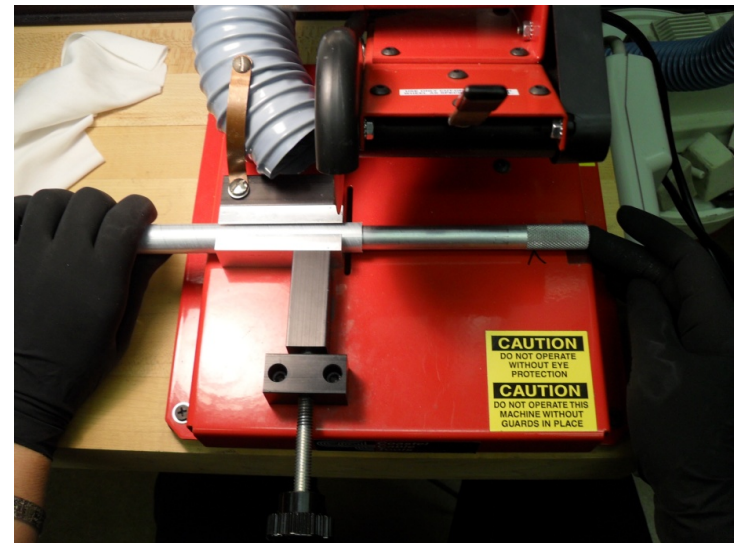
Caution: Straws should not be handled with bare skin. Use latex gloves during this procedure. The straws are cleaned using isopropyl alcohol. **Eye protection is to be worn during this procedure.**

- Do a quick visual check of the straw.
- Soak cotton ball in isopropyl alcohol
- Squeeze excess isopropyl from cotton ball
- Inset cotton ball into end of straw
- Using finger, push the cotton ball into the tube 1/2 inch.

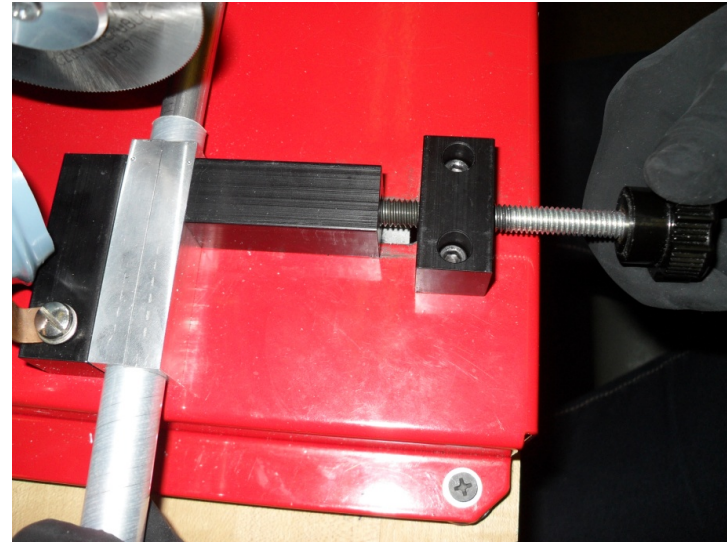


Put on eye protection

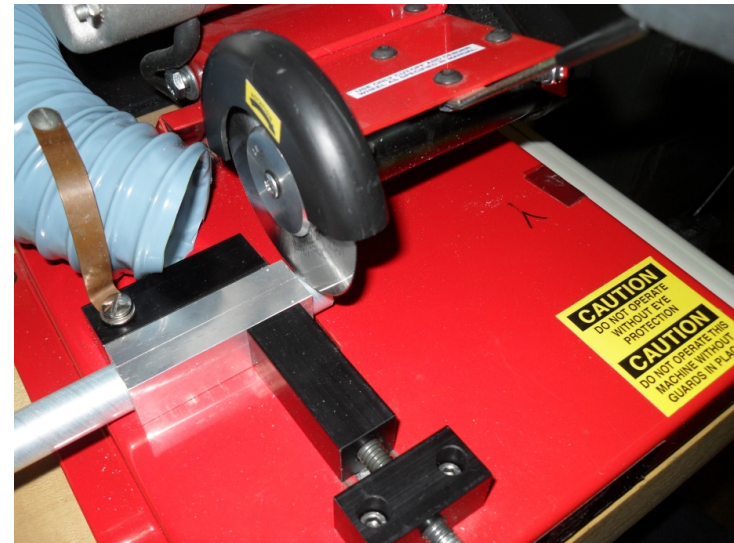
- Remove the magnetic V-block.
- Place tube on aligning V-blocks and slide one end into saw-vice
- Insert straw tube strengthening prop into the end by the saw
- Place straw in position to take off roughly 2 inches from end
- Push strengthening prop in until its handle is just inside of the saw platform edge



- Tighten saw-vice
- Remove handle from strengthening prop
- Turn on saw/vacuum using power strip switch



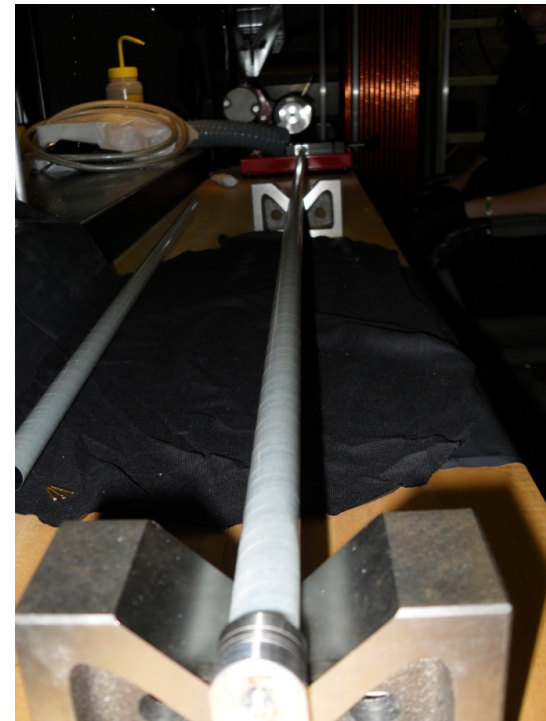
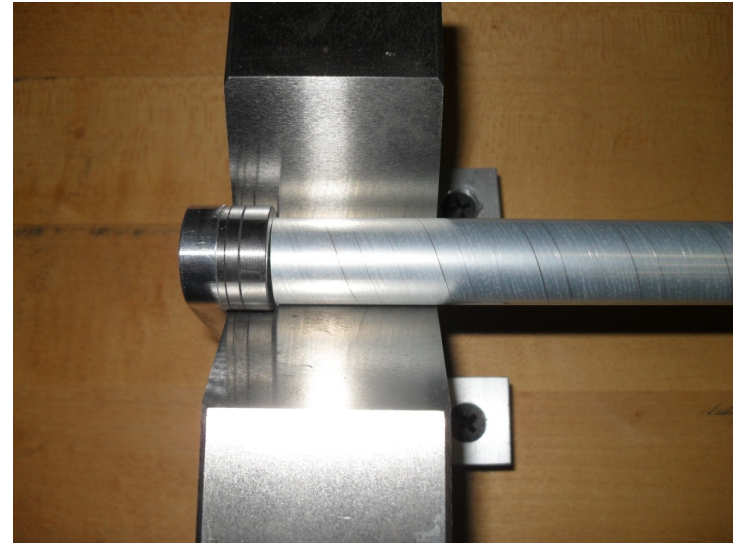
- Important to move saw blade **SLOWLY** to prevent a rough cut
- Shut off power strip
- Reattach handle to strengthening prop
- Loosen saw-vice and gently remove strengthening prop



- Remove straw from saw vice.
- Using pressurized air, blow the cotton ball through from the **opposite** end.



- Slide end of tube into vice and position magnetic length guide on the far V-block
- Make sure the end of the tube is right up against the magnetic length guide when the vice is closed
- Repeat prior steps for cutting



- Completed straws are stored in clean tubes until needed in the clean room. About 10 straws can be stored in a clean tube.
- To pass straws into the clean room, the following steps from clean room procedure are to be followed.
 - Make sure that no material is in the pass through.
 - Turn of the fan speed into the clean room.
 - Make sure that the person in the clean room is ready.
 - Open both doors to the pass through into the clean room.
 - Pass through the straw tubes.
 - Close the doors to the pass through.
 - Turn the fan speed back to normal.
 - If empty storage tubes come back out use the same procedure.
- In the clean room, the straws are laid out on the assembly table.