



FlipScribe® Quick Guide



Before starting check the following using an optical microscope.

- Check the scribe tip. The best results are obtained with a scribe tip that is free of chips or fractures.

Setting the tilt and height of the diamond scribe

- First set the tilt. The default setting on the right (-2 to -3) is good for most samples.
- The height of the diamond scribe tip should be set so it is just above the plane (surface) of the sample plate
- It is important that the final position of the scribe tip is as shown on the right, one of the sharp facets positioned horizontally, in line with the scribe aligning guideline.

Backside Scribing the samples

- Use the vertical guide and sample slide or the provided holders to achieve the best scribe.
- **For crystalline material use a short scribe.** Set the scribe stop with the leading edge of the sample touching the scribe tip as shown in Fig.3 to get desired length.
- When scribing off crystal planes or amorphous substrates such as glass, **you must** use a diamond scribe with its tip free of cracks or chips and **make a long scribe across the backside of entire sample.**

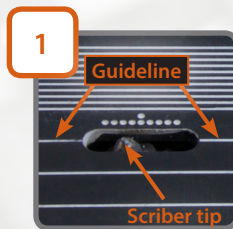


Figure 1: Setting tilt with the tilt indicators.

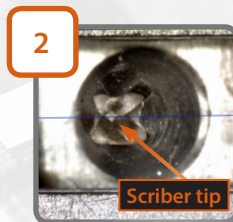


Figure 2: Scribe tip aligned with scribe aligning guideline shown in Figure 1 above.

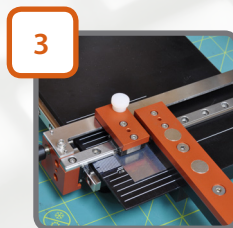


Figure 3: Sample ready for scribing.

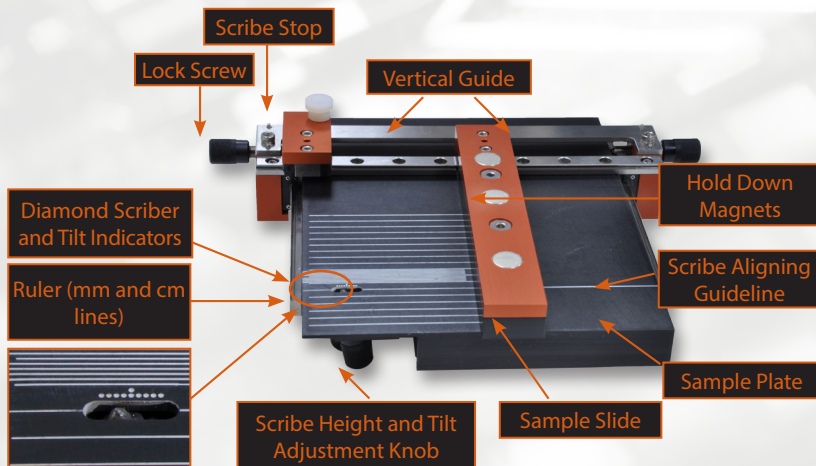
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How to cleave samples after scribing

- **Cleaving by snapping.** Grab the sample edge with the scribe facing up with both hands, typically using the thumb and middle fingers approximately 10 mm from the scribe and bend the sample away from the scribe. It will cleave along the direction of the scribe.
- **Cleave using the CleanBreak (CWB-100) or Small sample cleaving pliers (GC-SS-100).** Cleave the sample using cleaving pliers. The plier jaws are typically positioned on the edge of the sample with scribe facing the aligning mark on the pliers.
- **Cleave the sample over a pin.** Lay the sample with the scribe facing up over a paper clip, needle, fine wire or other pin. Push with fingers symmetrically on either side of the scribe until the sample cleaves.
- **Cleave using the FlipScribe.** Use the tip of the FlipScribe scriber to cleave the sample. Place the sample on top of the scriber tip with the scribe facing up. Push with fingers symmetrically on either side of the scribe until the sample cleaves. With this method, use of a stereoscope is recommended to allow the user to view the sample while it is cleaving, thus providing better control of the positioning and cleaving pressure.

Figure 4: FlipScribe components.



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