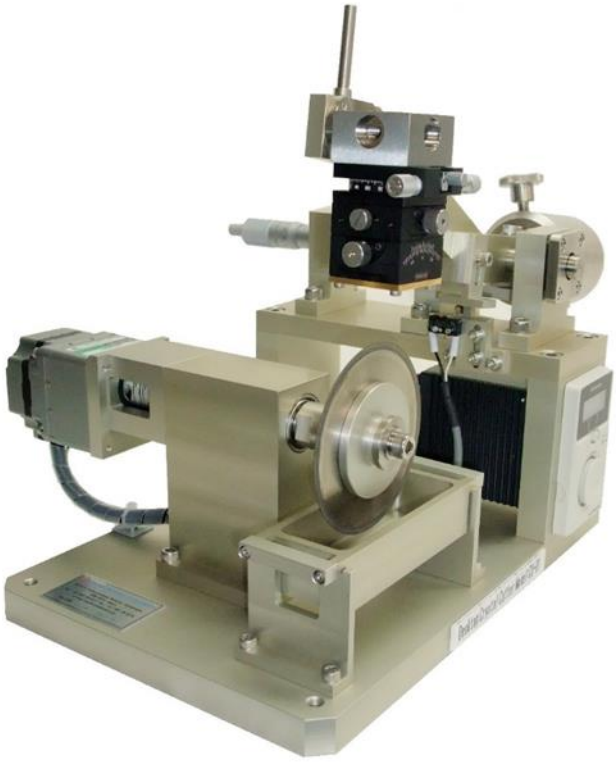
Desktop Crystal Cutter with Goniometer

Model : CU-02

The first machine launched to the market, which can cut the crystals at the same orientation as you identified with Xray Laue method.



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1. . Outline

This system is newly developed machine to cut precisely a sample rod with determined direction by the X-ray Laue method. The goniometer can be separated and set onto the X-ray Laue camera stage, and after the measurement of the desired direction by X-ray Laue method, this goniometer removed and set again on the cutter. This scheme can give the desired directional sample up to 20 mm diameter. Loading weight for blade can be adjustable to the sample rod.

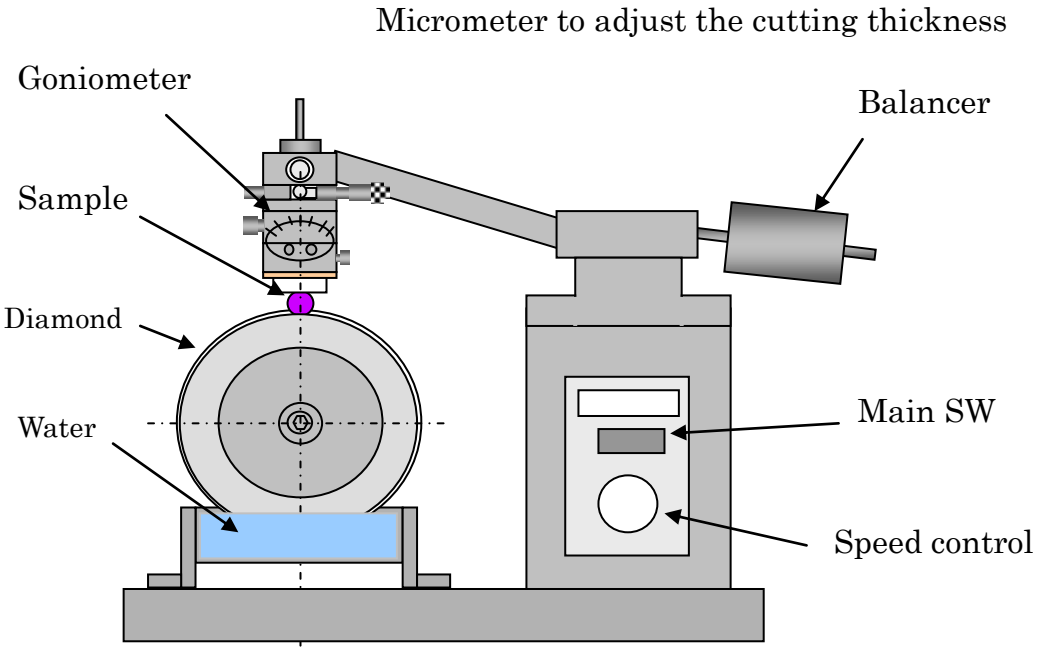
2. . Specification

- ✻ Cutting method： blade fixed, sample goes down to be cut.
- ✻ Cutting pressure： weight method
- ✻ Blade rotation： 1～80 rpm
- ✻ Automatic stop mechanism after cutting off
- ✻ 3-D goniometer
- ✻ Diamond blade Φ100mm×Φ15mm× t 0.3mm
- ✻ Power source: AC220V /5A

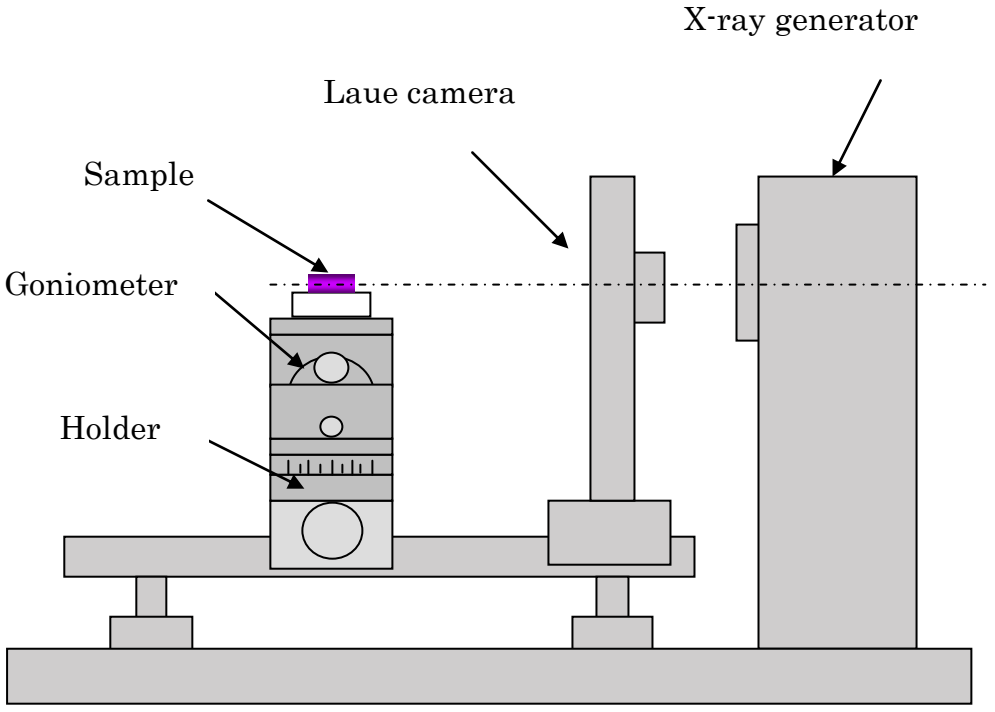
3. . Operation

- ✻ Attach sample to goniometer, place it to Laue camera holder, check crystal direction by X-ray Laue camera and decide its correct position.
- ✻ Set up the goniometer with positioned sample in place on cutting table, and start cutting. At this timing, the deviation of direction measured by X-ray Laue method can be controlled within 30 minutes.
- ✻ Confirm load to blade optimal with selected weight balancer.
- ✻ When it comes to sensor position of the sample, sensor detects it then blade rotation stops immediately.
- ✻ Water and other proper liquids can be used for cutting.

4. Schematic diagram of Fine Cutter



5. Scheme of measuring the orientation by the X-ray Laue camera.



Violet colored portions are not included in the quotation.

6. Goniometer structure