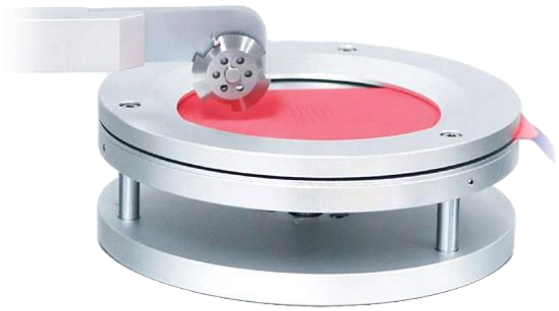
Automatic Cross Hatch Cutter T01-700409

Thank you for purchasing an Automatic Cross Hatch Cutter from Ascott. Please read these instructions carefully and retain for future reference.



Important Information

This equipment should only be used as intended by suitably qualified and trained personnel.

These instructions should be always readily available to such personnel.

Normal common-sense safety precautions must be taken at all times to avoid the possibility of accidents. We recommend that users produce their own risk assessment for the entire testing process for which this equipment will be used.

1.0 Introduction

As an important method to evaluate the degree of adhesion between coatings and substrates, the cross-hatch method is widely used. Although the traditional manual method is simple and convenient, it is liable to inaccuracies caused by different operators, or even the same operator using a different speed and force for each test. The latest ISO 2409-2019 standard advises that in order to obtain uniform and consistent cutting, automatic cross hatch adhesion testers should be used as far as possible.

- Uses a 7-inch industrial grade full touch screen, which can edit relevant cutting parameters and display the parameters clearly and intuitively.
- Cutting speed, cutting load, cutting intervals and cutting number (landscape cuttings & portrait cuttings) can be set.
- The load force in the cutting process is automatically compensated to ensure constant load and consistent cutting depth of coating.
- Automatic clamping of test sample. After a cut is completed, the working platform automatically rotates 90 °

2.0 Main Technical Parameters

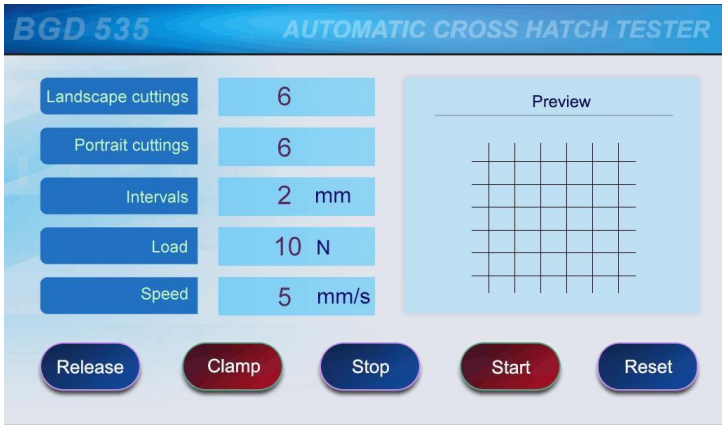
Power:	220V, 50/60HZ
Panel Size:	Max. width: 150mm×100mm; thickness: 0.5-20mm
Cutting Load:	5-50N
Cutting Space:	1-5mm
Cutting Speed:	1-20mm/s
Power:	80W
Overall Size:	540mm×335mm×380mm (L×W×H)
Net Weight：	27KG

3.0 Structure

4.0 Test procedure

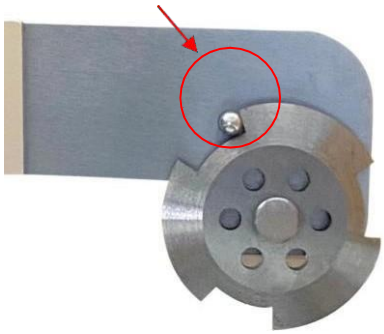
4.1 Take the instrument out of the case and remove the screw from the base. Place the instrument on a stable surface, facing the operator.

4.2 Connect the power cable and push the Power Switch to turn on. Press “Reset” to move the cutter arm to the initial position. (Emergency stop button: press this button to cut off the power supply and stop the instrument quickly. To start the instrument again, turn clockwise to release this button.)



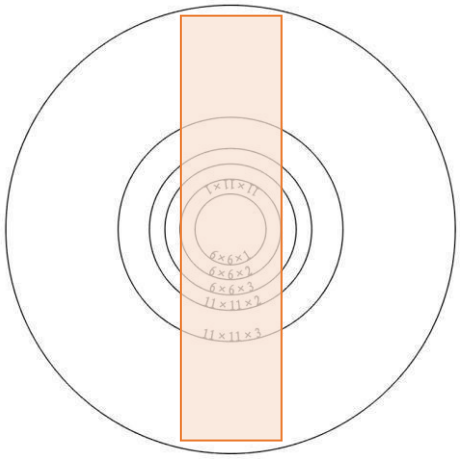
4.3 Open the Acrylic cover at the right-hand side and check the edge of the cutter. If the edge of the cutter is worn, loosen the nut on the other side and choose another edge. Ensure the upper side of the is aligned as below.

NB: the edge of the new cutter is about 0.05mm wide but will wear down over time with use. Replace cutter as required to ensure accuracy of results.



4.4 Setting a test: input the number of cuttings in landscape and portrait, intervals of the cuttings, load of the cutter and the cutting speed.

NB: the minimum width of the test panel is related to the number of cuts. Please ensure the relevant circle on the working platform is fully covered. For example, a test needs to make cross cuts of 6*6, and the cutting space is 2mm, in this case the panel should be wider than the second circle, as below:



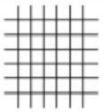
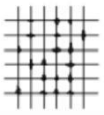
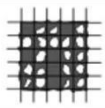
4.5 Press “Release” to lower the platform; place the test panel onto the platform and then press “Clamp” to secure.

4.6 After the test panel is secured, close the acrylic cover, and then press “Start” to run a test. The cutters will make the cross cuts on the panel automatically. If the operator wants to stop the test, press “Stop” and “Reset”.

NB: When the instrument is running, if the acrylic cover is not closed tightly, the screen will display "Protective cover is not closed", and the instrument will stop running (as shown below).

4.7 After a test is complete, press “Release”, open the acrylic cover, and take the panel out. If you want to continue to further tests, repeat steps 6.5~6.6 (and press “Reset” when it is suggested).

4.8 Evaluation of Results.

Classification	Description	Appearance of surface of cross-cut area from which flaking has occurred[a] (Example for six parallel cuts)
0	The edges of the cuts are completely smooth; none of the squares of the lattice is detached.	
1	Detachment of small flakes of the coating at the intersections of the cuts. A cross-cut area not greater than 5 % is affected.	
2	The coating has flaked along the edges and/or at the intersections of the cuts. A cross-cut area greater than 5 %, but not greater than 15 %, is affected.	
3	The coating has flaked along the edges of the cuts partly or wholly in large ribbons, and/or it has flaked partly or wholly on different parts of the squares. A cross-cut area greater than 15 %, but not greater than 35 %, is affected.	
4	The coating has flaked along the edges of the cuts in large ribbons and/or some squares have detached partly or wholly. A cross-cut area greater than 35 %, but not greater than 65 %, is affected.	
5	Any degree of flaking that cannot even be classified by classification 4.	—

[a] The figures are examples for a cross-cut within each step of the classification. The percentages stated are based on the visual impression given by the pictures and the same percentages will not necessarily be reproduced with digital imaging.

5.0 Attention

5.1 It is suggested to wear protective gloves when touching the cutters to avoid injury

5.2 Ensure the panel is in the middle of the working platform.

5.3 The load of cutters should be 5N~30N in general. It is suggested to start at 5N and increase the load once it does not cut the sample thoroughly.

5.4 Please avoid any shaking or shock to the arm of the cutters.

5.5 Close the acrylic cover before running a test.

If you have any queries regarding your new equipment, or require any additional accessories or consumables, please contact info@ascottshop.com or telephone +44 (0)1827 318040. If you wish to contact us by post, our full mailing address is 6-8 Gerard, Tamworth, Staffordshire, B79 7UW