

HOW TO FIX HOOKING ISSUES

Sometimes Gunnar owners may experience "hooking" problems with their matcutting.

This problem can be caused by a number of different factors. Listed below are some technical suggestions that may assist you in "identifying" where your problem is coming from.

Firstly, always start with a **new blade** and a **new slipmat**. After you have done this, please cut a small single rectangle in a piece of matboard.

Blade Depth - Excessive blade depth (ie: too deep) is the most common cause of hooking.

- ❑ The best method for testing blade depth is to put 4 sheets of photocopy paper under the mat opening, before you cut the aperture - the 3 top sheets should be cut through & the bottom one (the 4th) should remain intact!
- ❑ It is also important to be aware that if you use the same blade holder to cut different brands or thicknesses of mat, then you may get different results with blade depth. You may have to set a new blade holder for different thicknesses of matboard that differ from your standard mat.
- ❑ Boxes of blades can slightly vary in length from box to box, causing potential issues with blade depth. Always check the depth setting of you blade holders when you change over to a new box of blades.

Overcuts – Sometimes if you don't have enough overcut, you can get a slight hook. Please take a moment to watch the cycle of a cutting procedure for the matcutter, as it cuts an opening from the back of a matboard. As you do this, please take note as to which end of a cut is the "**start**" and which end is the "**finish**".

- ❑ If you then have a look at the front of the matboard, choose a corner with a hook and label which cut is the "start of cut". Most of the time when you get a hook, it is almost always the "**start**" of cut.
- ❑ Go to the **Settings** → **Cutter Settings** menu. Find the "**Back Overcuts**" tab. And adjust overcut/undercut as per the diagram.
- ❑ It is best to set the "**start**" of cut for a slight overcut of at least 0.25mm - 0.5mm. If you look at your sample of matboard in the corner and find absolutely no overcut (or even an undercut!), then you should increase this accordingly. This also allows for inconsistent variance in matboard thickness from manufacturing, etc.

Straight Correction - Straight Correction is the value used to "offset" the initial entry angle of the cutting head, to get it to cut a straight line, and it is measured in degrees. This value can be altered, to correct any hooking, given that there are no issues with the blade depth or the overcuts.

- ❑ Straight Correction can be adjusted individually for each profile of matboard in the "define mat profiles" directory (**Settings** → **Define Mat Profiles** or keyboard shortcut "CTRL D"). These values can be found under the column that says "Straight C."
- ❑ Each different thickness of matboard may require a different Straight Correction. Generally, the thicker or denser the mat, then the larger the value for the "angle of offset" required (ie: straight correction).
- ❑ **Note:** It is possible to have two matboards of the identical thickness (eg: 1.3mm) but different densities (eg: Watermark and Xpress Grafix are very dense, whereas Bainbridge and Crescent are a lot less difficult to cut). Denser matboards are more difficult to cut, so they apply more resistance to the blade. This means you may need two different straight corrections for two brands of matboard which are the same thickness. *For example, you may have to set a blade for Bainbridge 1.3mm and another blade for Watermark 1.3mm, with different profiles (like C3 and C4) just because one needs a greater "angle of offset" or "straight correction.*
- ❑ If you get an **inconsistent** hooking problem, then this could be your problem.
- ❑ Average Straight Correction values are generally set between 4 and 9 degrees. Straight Corrections should very rarely be set at a figure greater than 10. If this is a case, please inform our technician, as mechanical adjustment may be required.

Pressure - Make sure that the air supply through the machine's regulator reads 3.5 bars. If it is any more, then the cutting head is coming down too hard, and consequently causing a hook at the "start of cut". This is the least most common cause of hooking, but could still be of concern.

Additional Mechanical Causes of Hooking – These possibilities are both rare, and advanced by nature. Only investigate & consider these possibilities of instructed by a Gunnar Technician:

1. The play between the teeth of the z-axis nylon gear wheels in the cutting head could be excessive, causing extra movement in the z-axis.
2. The roller bearings in the x or y axis could be worn or loose, and require adjustment.