Quick Guide TS Laser Engraver

• Laser Engraving Thin Section Labels

This method affords a fast way of engraving legible and uniform thin section labels. The acrylic tray with the wooden brackets accurately positions the thin sections inside the chamber every time. It can hold up to 12 small thin sections on one side, and four large thin sections on the opposite side.

Place Tray in Laser Engraver: with the side of the tray that you need to use facing up, and the wooden bracket extensions towards you, tilt the tray and place it diagonally inside the laser engraving chamber (*Photo 1*). Gently rotate and set it down until the acrylic tray completely sits on top of the whole round platform, and the wooden brackets are between the platform and the wall on both sides. Pull from the back to slide the tray towards you so that the wooden bracket is flush against the front (portside) aluminum posts of the chamber (*Photo 2*).

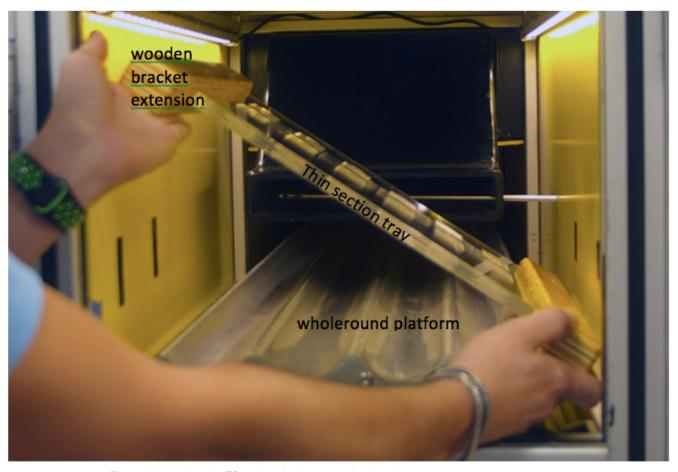


Photo 1: How to place the TS tray into the laser engraving chamber.

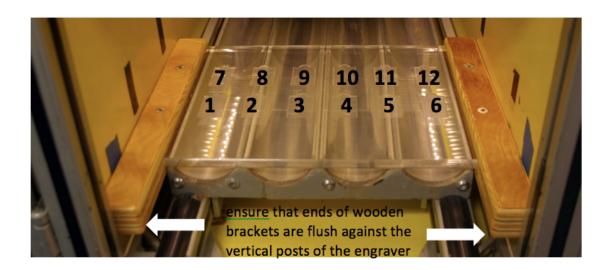


Photo 2: TS tray set to engrave small thin sections.

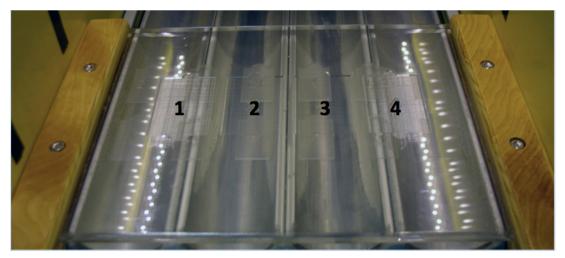


Photo 3: Opposite side of the acrylic tray with four bins for large thin sections

Steps:

- 1. Sequentially place the thin sections in the bins as numbered, with the frosted side facing up and top of thin section pointing into the chamber (i.e., oriented as the bin numbers; opposite to how wholeround sections are placed for engraving).
- If LaserKatjie3 is open, close this application and open MarkingBuilder2. For engraving small thin sections, open the label template: File > Open > MyDocuments > TS Engraver > TS_engraver-small. MBL (or ... TS_engraver-big.MBL)
 Edit the labels. Each label is referred to as a "block" and each of the 12 thin section/bin has 2 blocks: upper and lower. The upper block has the
- 3. Edit the labels. Each label is referred to as a "block" and each of the 12 thin section/bin has 2 blocks: upper and lower. The upper block has the site number, hole, (up arrow) and thin section number; the lower block has the core number and type, section number, piece number if any, and the offset of the billet from the parent sample. The 24 blocks are consecutively numbered towards the right, starting from the front-left bin (*Figure*. 1).
- 4. In the upper right part of the window, toggle to the block number that you want to edit (likely starting from 001). The corresponding block will be highlighted in the main window. In the **Character box**, edit the text pertaining to the thin section in the bin. DO NOT MOVE ANY OF THE BLOCKS!!! (Note: Store a backup copy of the template file. Alternatively, a csv file version can also be loaded.) Save a new copy of your file.
- 5. If any of the bins are empty, select and delete the corresponding labels in the temple, otherwise a label will be engraved on the acrylic tray! DO NOT OVERWRITE ORIGINAL template file.
- 6. Label and alignment verification. To verify that the label corresponds to the actual slide deselect **Marking Laser or Marking + Guide Laser** and select **Guide Laser Continuous**, this will show you where the laser will mark. Alternatively you might want to test the text by lasering a bond paper (Test Page).
- 7. Test Page: tape in place a letter-size bond paper on top of the tray with thin sections.
- 8. In the bottom toolbar, click on the Test Marking button. Follow the prompts.
- 9. In the **Test Marking Window**, under the **Test Marking Mode**, select **Marking Laser** (*Figure 2*). When ready, click the **Trigger** button. This will engrave the Test Page.
- 10. Remove the engraved test page and review the text. Modify as needed and repeat steps above using a new bond paper (test page). Once everything is correct, make the actual engraving on the thin section slides: select **Marking Laser** and click **Trigger** (*Figure 2*).
- 11. When done, collect the thin section slides from the tray.
- 12. In removing the tray, it is important that you first lift the tray clear of the whole round platform (*Photo 4*) before tilting it sideways (*Photo 5*), else, you can break the tray and the walls of the engraving chamber.

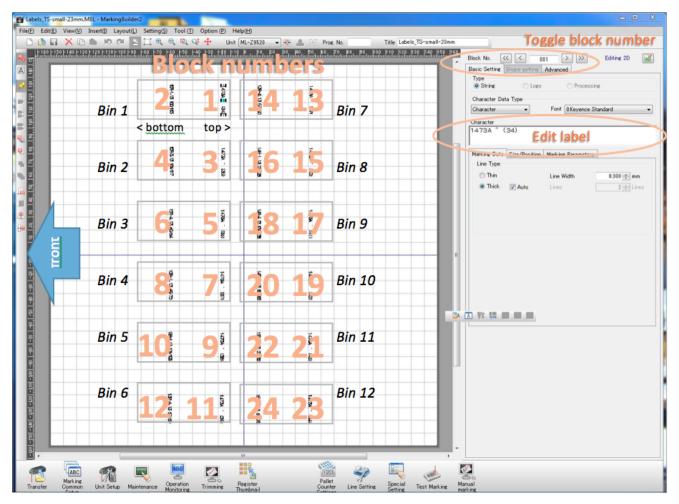


Figure 1: MarkingBuilder2 window of the template for labels of small thin sections

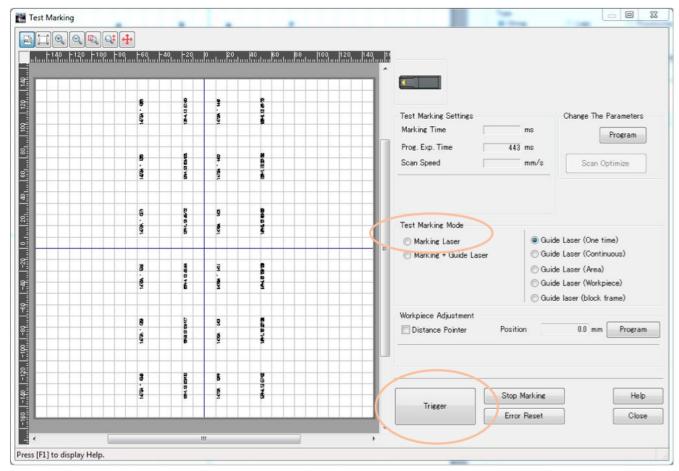


Figure 2: Layout of the template and panels for editing label and Marking Page



Photo 4: To remove the TS tray, first lift it clear off the wholeround platform.



Photo 5: Tilt the tray sideways and pull it out through the diagonal of the chamber.

Credit

Original version created by Susan Boehm

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