

20oz Powder Coated Tumblers - For use on the Flux Beamo Desktop Laser Cutter & Engraver



20OZ POWDER COATED TUMBLERS - Flux Beamo Laser Cutter & Engraver / HOBBY Laser Engraving

SRT-W20E | SRT-B20E | SRT-SF20E



GENERAL LASER ENGRAVING PROCESS

Recommended Equipment & Accessories

- Flux Beamo Desktop Laser Cutter & Engraver with rotary attachment, or HOBBY CO2 Laser Engraver
- Hobby Laser cutter & engraver with rotary attachment if available Clean Towel
- Clean Towel
- Isopropyl Alcohol
- Kitchen Degreaser Cleaner

Recommended Settings- Flux Beamo Laser Engraving with Rotary Attachment	
30-40W lasers	
Laser Power	30-35%
Laser Speed	200 mm/s
Resolution (DPI/PPI)	500 (High)

Recommended Settings- HOBBY Laser Engraving	
30-40W lasers	
Laser Power	30-35%
Laser Speed	65-75%
Resolution (DPI/PPI)	500-600

Flux Beamo Laser Engraving Instructions

- **For best results,** it is highly recommended to use the optional Rotary Extension for Flux Beamo available for the Flux Beamo laser.
 - **BEFORE INSTALLING THE ROTARY EXTENSION,** first use the laser's flat bed and cutting table insert to cut out the elevation spacer disk for the 20oz Powder Coated Tumbler.
 - Use the Elevation Spacer Disk template file to cut out the elevation spacer disk. The template is able to be downloaded from the 20oz Powder Coated Tumbler product page under the Tech Docs/Downloads tab on JPPlus.com
 - It is recommended to use 1/8" thick acrylic or similar material for the elevation spacer disk.



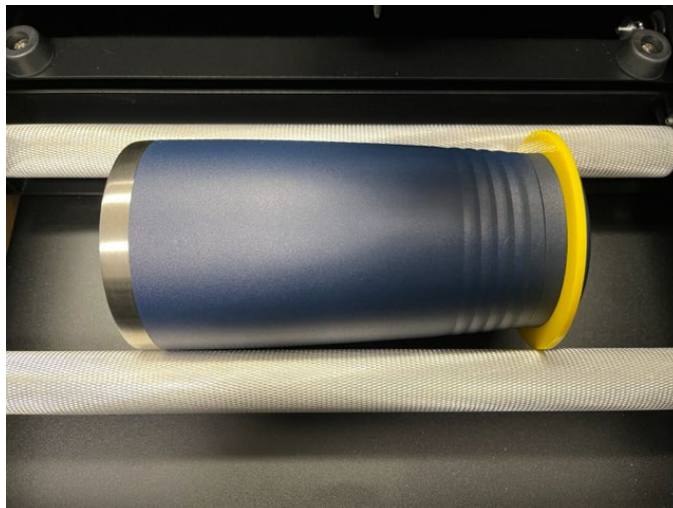
- After cutting out the elevation spacer disk for the 20oz Powder Coated Tumbler, the rotary extension may be installed.
 - For instructions on installing the Rotary Extension for Flux Beamo, see the Tech Docs/Downloads tab of the Rotary Extension for Flux Beamo product page, found on JPPlus.com.

Using the Rotary Extension for Flux Beamo

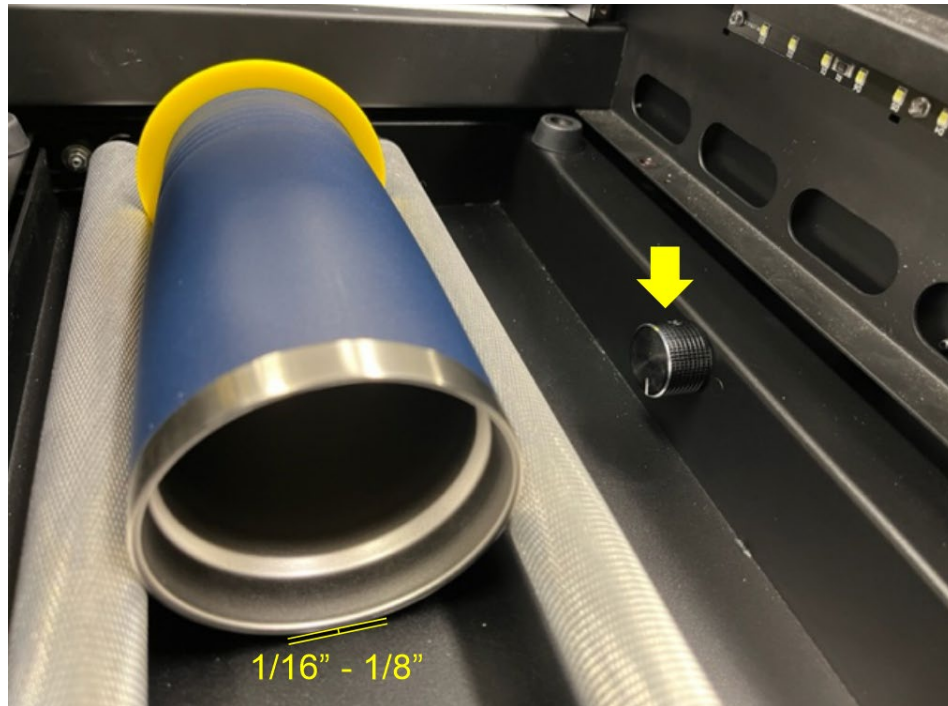
- After the rotary extension is installed, turn the laser power on.
- Place the elevation spacer disk onto the bottom of the tumbler. Make sure the disk fits snug against the tumbler, but do not force the disk onto the tumbler to avoid damage to the powder coating.



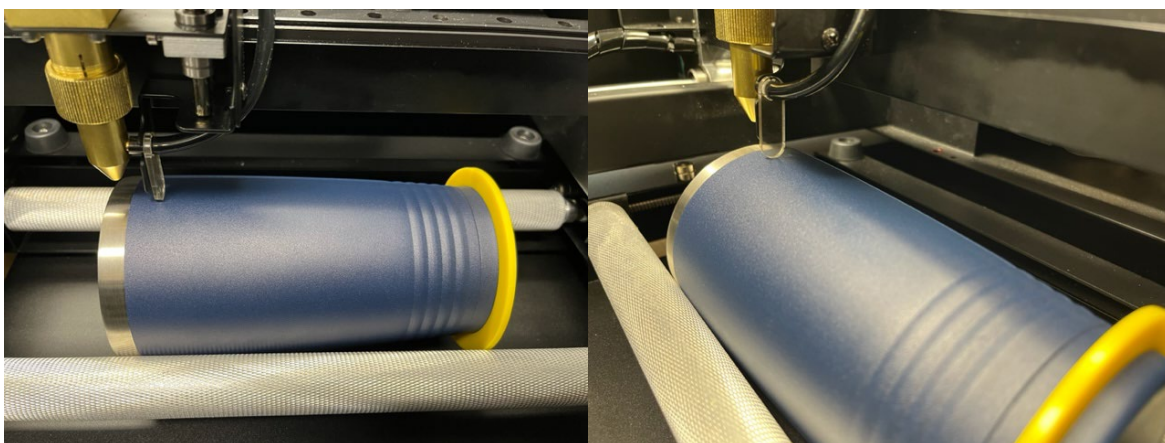
- Place the tumbler with attached elevation spacer onto the rollers of the rotary attachment.



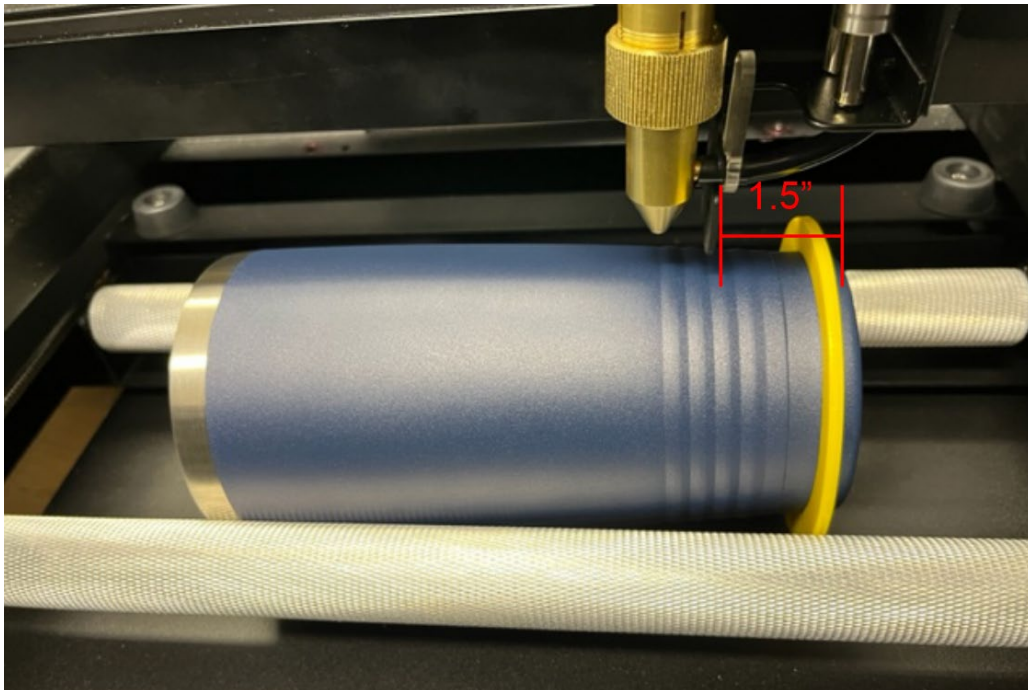
- Use the roller adjustment knob on the rotary attachment to adjust the spacing of the rollers, so that the bottom edge of the mouth of the tumbler is approximately 1/16"-1/8" above the floor of the rotary attachment.
 - **Tip:** Using a piece of 1/16" or 1/8" thick material to place under the mouth of the tumbler can be used as an approximate gauge for setting the optimal roller position.



- Move the laser head over to the tumbler and position it directly above the highest point of the side of the tumbler.
- Rotate the clear acrylic focus tool to the downward position and loosen the laser focus set screw to adjust the focus of the laser head to the highest point on the tumbler side.



- Move the laser head to the right to ensure that the side of the tumbler is still in focus towards the bottom of the tumbler.
- When finished, tighten the set screw to lock the focus position. Rotate the acrylic focus tool back to the upward position.
- Once the focus is set to the highest point on the side of the tumbler, use the camera mode in the Beam Studio software to create a photo rendering of the laser bed. This will populate an image of where the tumbler is on the Beam Studio layout.
- Using the photo rendering, center the artwork over top of the tumbler. Adjust size and other settings as necessary.
 - **CAUTION:** Make sure the bottom of the artwork is at least 1.5" away from the bottom of the tumbler to prevent the laser head from hitting the elevation spacer disk during the engraving process.



- When finished, send the engraving to the laser in the Beam Studio software using the recommended starting settings.
- If cleanup is needed, wipe the surface with a clean cotton cloth lightly misted with isopropyl alcohol or a kitchen degreaser cleaner.

General HOBBY Laser Engraving Instructions/Flux Beamo Engraving Instructions WITHOUT the rotary attachment

- Place the tumbler onto the laser bed and align to the zero point on the laser bed.
 - For best results, utilize a jig to help hold the tumbler level and in place during engraving.
 - Flux Beamo: Position the tumbler on the laser bed. Elevate the bottom of the glass so that the side of the tumbler is parallel with the laser head.
 - Removing the cutting grid insert may be necessary for secure positioning of the tumbler.
 - Adjust the laser focus to the surface of the tumbler.
 - With the tumbler on its side, focus the laser just off of the highest point of the tumbler side (usually approx. 1/4" to the left or right of the highest point of the side of the tumbler).
 - Once the artwork is positioned, engrave using the suggested starting settings.
 - Flux Beamo: Use suggested starting settings listed in the Flux Beamo chart above.
 - Settings may need adjusted depending on the laser tube wattage.
 - Laser focus may need to be slightly offset from the highest point of the curvature of the tumbler in order to accommodate more engraving width on the tumbler when the tumbler is engraved stationary (not using a rotary attachment).
 - When finished, remove the tumbler from the laser bed.
 - If cleanup is needed, wipe the engraved areas with a clean cotton cloth lightly misted with isopropyl alcohol or a kitchen degreaser cleaner.
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Tips and Tricks

- To help with artwork placement, utilize the product template for this item, found on the item's product page on jpplus.com/.
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Troubleshooting

- The engraved area is charring/melting.
 - Laser power setting and/or resolution may need to be decreased.
 - Laser speed setting may need to be increased.
 - The engraved area is very light/the color coating is not engraving away completely.
 - Laser power setting and/or resolution may need to be increased.
 - Laser speed setting may need to be decreased.
 - The laser focus may need to be adjusted.
 - The laser focus may need to be set to just off of the highest point of the side curvature of the pint glass to accommodate more engraving area on the side of the glass.
 - The laser beam alignment may need to be adjusted.
 - The laser tube may be degrading and need to be replaced.
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Templates and Images

- Visit jpplus.com to find the product page for this item. The product template may be found under the Tech Docs and Downloads area of the page.

To order more of this product, see similar products and much more, please visit jpplus.com.

For additional product support and troubleshooting, please contact JPPlus Advanced Support Team:

- Phone: 419-500-4877
- Email: ast@jpplus.com
- Schedule an appointment: <https://jpplusadvancedsupport.setmore.com/>