

TIP 112 — Fabricated Backsplash for the Sherline Benchtop Lathe/Samuel MackatroniX

Designing and Making a Backsplash for the Sherline Lathe
Samuel designed a backsplash for his 17" Sherline Benchtop lathe to make project cleanups easier. Sam sent us photos of his new backsplash along with a YouTube video link that shows his design process using Fusion 360: [Backsplash for the Sherline Lathe](#).

He used the 3D IGS model for the 4400-Series Benchtop Lathe available on the Sherline website to get dimensions for his backsplash before sending it out for fabrication.

Sam writes, "I own a Sherline 17" lathe and it is my prize possession. I have never cared this much about a tool. My lathe is mounted to a custom stand I made which sits on top of a workbench. When I use the lathe, chips and debris tend to get flung back between the lathe and the wall, making cleaning up a bit of a pain. I thought about different solutions for a while before landing on a sheet metal backsplash. Designing and fabricating sheet metal is not something I have a lot of experience with so it was not my first choice but decided to take it on and try to learn a bit more. I modeled the part using Fusion 360's sheet metal CAD tools and it went pretty smoothly. I decided on .060" cold rolled steel because I wanted it to be rigid and work with my magnetic tools. I have a lot of additional ideas for tool storage with the addition of the backsplash. Overall, the project was a success. The messes are much more contained and having more surface to mount my light and indicator base on is an added benefit." Sam uses Boeshield T-9 to clean and protect his new steel backsplash.



Sam found an issue with the IGS model for the cast base. The holes in the base of the model near the headstock are not aligned in the X-axis. He makes mention of this issue in his video.

Sam's lathe has the older cast base. We have updated our base for the 17" lathe, but his enclosure will fit the new base. Here is a link to the new 24" machined lathe base assembly for reference: [24" Machined Lathe Base Assembly-2024 Series](#).

If you are interested in making a backsplash for your Sherline benchtop lathe, you can contact Sam at mackatronix@gmail.com.

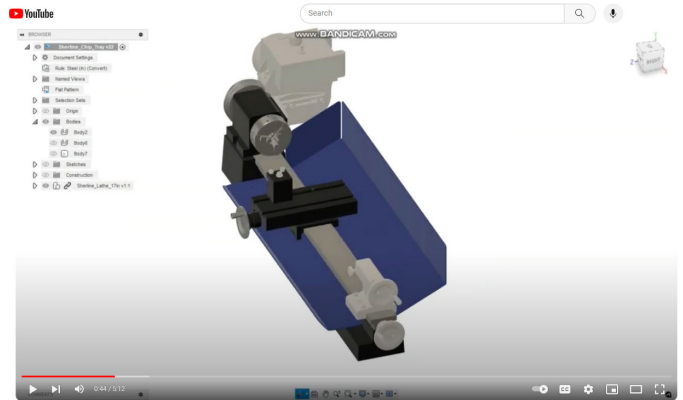


FIGURE 1—A screenshot of the lathe and backsplash 3D model. See more of Sam's videos on his [MackatroniX YouTube channel](#).

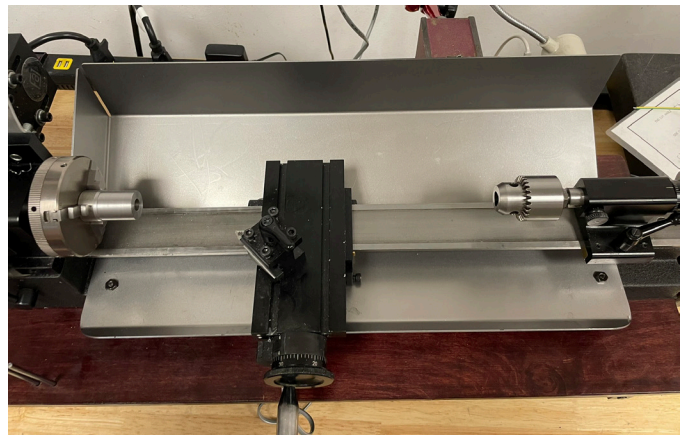


FIGURE 2—The backsplash mounted to the lathe and ready for turning a project.

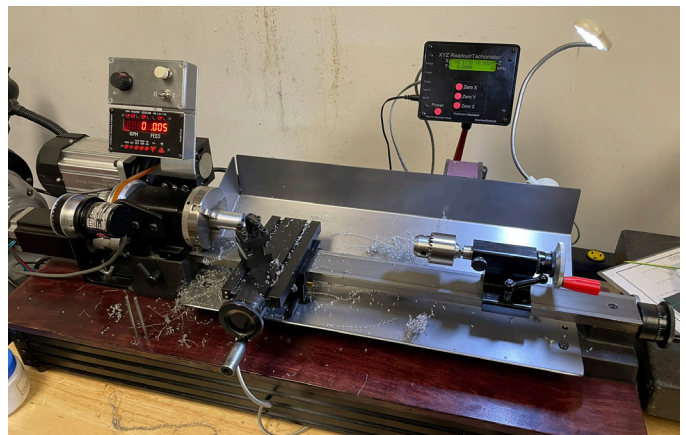


FIGURE 3—The backsplash filled with chips. The backsplash helps prevent debris from flying between the wall and the backside of the lathe.