

Expandable Workstation for Shaper Origin

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I designed this workstation to hold both vertical and horizontal pieces. But, this design is not 100% original because I used existing workstations on the Shaper Hub as a starting point. I therefore want to thank Shaper, Lee, GlennStasse, prstloui, and others for donating their ideas for others (like me) to use. I hope that other people will not just benefit from this design, but improve on it.

This workstation is expandable. In its condensed configuration the work area is 3" x 20". In its expanded configuration the work area is 12" x 20" and will hold pieces up to 9" tall.

With many pieces you would use a spoilboard and tape to attach pieces to the horizontal support piece. An accessory board with tee tracks attaches to the top of the horizontal support piece. This allows you to clamp pieces horizontally without tape.

The plywood that I used for my workstation was .70" thick so the design is based on plywood of that thickness. Consequently, there are a few odd dimensions since the plywood wasn't actually .75" thick. Please adjust your workstation as needed for the plywood that you are using. I did use 1/2" plywood for a few pieces on the extension wings, but most of it is 3/4". I should mention that although standard tee track is 3/8" deep, mine is 1/2" deep, so the dados in my sketchup model are also 1/2" deep.

I didn't attempt to nest the pieces on to larger sheets of plywood because I cut most of the outside dimensions with my table saw. Therefore, most of the pieces are in individual svg files.

Main Body of Workstation

Part	Number Required	Outside Dimensions	Notes
Tape Board	One	18" x 24"	
Backer Board	One	31" x 12-3/4"	
Vertical Clamping Board	One	~21.2" x 11"	Insert at least two alignment pins and use them to register this piece so that the three pins are exactly 90 degrees to the tape board. A right and left set of pins allows you to use the angle support piece from either the left or right side.
Outside Support Board	Two	9" x 12.7"	
Inside Support Board	Two	5.2" x 12"	
Support Gussets	Two	~6-1/4" x 1-1/2"	1/2" thick
Spoilboard	One	21-1/2" x 1-3/4"	
Angle Support Board	One	3-1/4" x 13"	
Vertical Stop Board	One	2" x 24"	Use pull latch to temporarily hold in place when setting vertical position of work piece

Extension Wings and Shaper Support Board

Part	Number Required	Outside Dimensions	Notes
Inside Board (R)	One	9-1/2" x 12-3/4"	Cut dados on both front and back sides
Inside Board (L)	One	9-1/2" x 12-3/4"	Cut dados on both front and back sides
Center Board	Two	3-7/8" x 12-3/4"	
Outer Boards	Two	6" x 12-3/4"	1/2" thick
Shaper Support Board	One	2-3/4" x 20"	
Support Guide Blocks	Two	2-3/4" x 2-1/4" x 1-1/2"	
Extension Wing Guide Blocks	Two	3/4" x 3/4" x 2"	

Horizontal Support Piece

Part	Number Required	Outside Dimensions	Notes
Vertical Piece	One	9" x 12"	
Braces	Two	9-1/4" x 8-3/4"	These are nested in one file. The outside dimension of that piece of plywood is 11" x 8-3/4"
Horizontal Piece	One	9" x 12"	
Support Gusset	One	5" x 1"	
Support Gussets	Two	~2-7/8" x 1"	
Accessory Board	One	9-3/4" x 15"	Dados/mortises are different on top and bottom. Place tee bolts in short sections of tee track before gluing those pieces in place.
Accessory Board Stop Piece	One	6-1/4" x 1-1/2"	