



DRILL PRESS VICE 3 WAY









- This Vice is equipped with convenient unigrip mechanism.
- Spindle moves inside the hollow hand grip allowing the vice to be used at location away from the table edge.
- The 3-Way vice is available with 3 mounting options.
- The ability to adjust the vise along these three axes provides greater flexibility and precision in positioning the workpiece for machining.
- It allows machinists to accurately align the workpiece with the cutting tool or spindle, ensuring precise drilling, milling, or grinding operations.

Cat. No.		Jaw Width		JAW OPENING		JAW DEPTH	
	Inch	mm	Inch	mm	Inch	mm	INCH
GPV-0122	4	100	4	95	3-3/4	30	1-1/5
GPV-0125	3	80	3	80	3	30	1-1/5

How to Use

Using a three-axis drill press vise requires attention to detail and proper setup to ensure accurate and safe machining operations. Here's a step-by-step quide on how to use a three-axis drill press vise:

1. Preparation:

- · Ensure that your drill press or milling machine is properly set up and secured.
- Select the appropriate cutting tool (drill bit, end mill, etc.) for your machining operation.
 Prepare the workpiece by deburring edges and ensuring it is clean and free of any contaminants.

2. Mounting the Vise:

- Place the three-axis drill press vise on the machine table or workbench where it will be used.
- · Use bolts or clamps to secure the vise firmly in place, ensuring stability during machining operations.

3. Aligning the Vise:

- Adjust the vise along the X-axis and Y-axis to position it correctly relative to the machine's spindle or cutting tool.
- · Use the machine's built-in alignment features, such as alignment slots or reference marks, to ensure accurate positioning.

4. Inserting the Workpiece:

- Open the vise jaws wide enough to accommodate the workpiece.
 Place the workpiece securely between the vise jaws, ensuring that it is centered and aligned properly for the machining operation.

5. Clamping the Workpiece:

- Use the vise's clamping mechanism to tighten the jaws securely around the workpiece.
- Apply firm, even pressure to ensure that the workpiece is held firmly in place and will not move during machining.

6. Adjusting the Vise:

- Utilize the vise's three-axis movement capabilities to position the workpiece precisely for the machining operation.
- · Adjust the vise along the X-axis, Y-axis, and Z-axis as needed to align the cutting tool with the desired machining location on the workpiece.

7. Performing the Machining Operation:

- Turn on the drill press or milling machine and adjust the speed and feed settings according to the material and cutting tool being used.
- · Carefully lower the spindle or cutting tool onto the workpiece, ensuring that it is aligned properly for the machining operation.
- Begin the drilling, milling, or grinding operation, taking care to maintain steady feed and pressure to achieve the desired results.

8. Inspecting and Finishing:

- Once the machining operation is complete, inspect the workpiece for any defects or imperfections.
- If necessary, perform any additional finishing operations, such as deburring or surface smoothing, to achieve the desired final product.

9. Removing the Workpiece:

- · After machining is complete and the workpiece has cooled if necessary, release the vise's clamping mechanism and remove the workpiece from the vise.
- · Clean the vise jaws and machine table to remove any deis or coolant residue.

10. Shutdown and Maintenance:

Turn off the drill press or milling machine and clean any chips or deis from the work area.



www.garvintools.com