

HIGH-PRECISION GRINDING AND CONTROL VISE



A Very High Precision Grinding Vice for Accurate Grinding Jobs. Tool steel, through-hardened, fully precision-ground.

A high-precision grinding and control vise is a specialized tool used in machining and manufacturing processes, particularly in precision grinding operations. The primary purpose of such a vise is to securely hold workpieces during grinding or other machining operations with a high degree of accuracy and repeatability.

- Vice manufactured from hardened and ground steel.
- Base manufactured from steel grade cast iron.
- Swivels on 2 levels, 360° horizontal, $\pm 45^\circ$ vertical
- Scale for precise minute readout
- Screw for upward and downward swing
- For grinding, boring, milling, eroding

CAT.NO.	JAW WIDTH		JAW OPENING		JAW DEPTH		TOTAL LENGTH
	INCH	MM	INCH	MM	INCH	MM	MM
GSV-5178	2.3/4	70	3.1/4	82	1.1/4	32	175

How to Use

Using a high-precision grinding and control vise involves several steps to ensure accurate and efficient results. Here's a general guide on how to use such a vise:

- Setup:**
 - Ensure that the work surface and the vise are clean and free of debris.
 - Mount the vise securely on the grinding machine or workbench. Make sure it is stable and properly aligned.
- Selection of Workpiece:**
 - Choose the workpiece you want to grind. Ensure that it is of the appropriate material and size for your grinding requirements.
- Inserting the Workpiece:**
 - Open the vise jaws wide enough to accommodate the workpiece.
 - Place the workpiece into the vise jaws, ensuring that it is positioned securely and centered for uniform grinding.
- Securing the Workpiece:**
 - Close the vise jaws firmly to secure the workpiece in place. Ensure that it is tightly held to prevent any movement during the grinding process.
- Precision Adjustment:**
 - Many high-precision vises come with fine adjustment features. Use these adjustments to finely tune the position of the workpiece for precise grinding.
 - Check and adjust the vise to achieve the desired angles and dimensions for your grinding task.
- Grinding Process:**
 - Turn on the grinding machine and carefully bring the grinding wheel into contact with the workpiece.
 - Follow the appropriate grinding procedures and safety guidelines for the specific material and type of grinding you are performing.
 - Monitor the grinding process to ensure that the workpiece is being ground evenly and accurately.
- Quality Control:**
 - Periodically check the workpiece dimensions and quality during the grinding process. Make any necessary adjustments to the vise or grinding machine if needed.
- Coolant (if applicable):**
 - If your grinding process requires coolant, ensure that it is applied correctly to prevent overheating and maintain the quality of the grinding wheel.
- Completion and Inspection:**
 - Once the grinding process is complete, inspect the finished workpiece for the desired dimensions and surface finish.
 - If adjustments are needed, use the vise controls to make fine-tuning corrections.
- Cleaning and Maintenance:**
 - After use, clean the vise and the work area. Remove any debris or grinding residues.
 - Regularly inspect and maintain the vise to ensure its continued precision and functionality.

Always refer to the specific user manual provided by the manufacturer of the high-precision grinding and control vise, as different models may have unique features and operating instructions. Additionally, follow safety guidelines and use personal protective equipment when operating grinding

machinery.



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