

A steel bench vice is a heavy-duty, mechanical work-holding device mounted directly onto a workbench. It features two jaws—one fixed and one movable—that are tightened via a threaded screw to securely clamp materials in place. It is essential for cutting, filing, drilling, and shaping. **Core Components**

Base: Attaches directly to your workbench, available in fixed (rigid) or swivel (rotates $\{360^{\circ}\}$) designs.

Jaws: The gripping surfaces, often featuring replaceable, hardened steel serrated plates for a non-slip grip.

Main Screw & Nut: Operates via fine-pitch or square threads to control the smooth opening and closing of the moving jaw.

Tommy Bar: The handle used to rotate the main screw, applying precise clamping pressure.

Anvil: A flat, hardened area on the rear of the vice body used for light beating and shaping tasks.