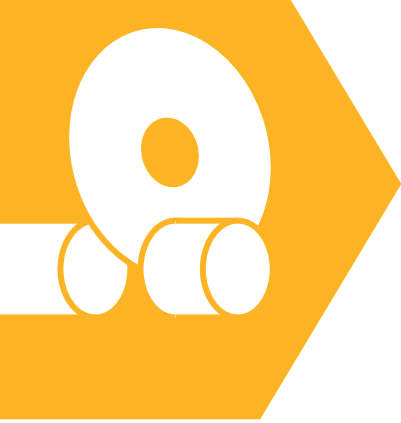




# Vising

Application  
Guide

A complete line of Abrasive Vises for Sectioning Samples



# Proper Vising is Critical

The first step of a sample preparation process is typically sectioning a smaller sample out of a larger part. Vising plays a critical role in the sectioning process to ensure consistent and repeatable results.

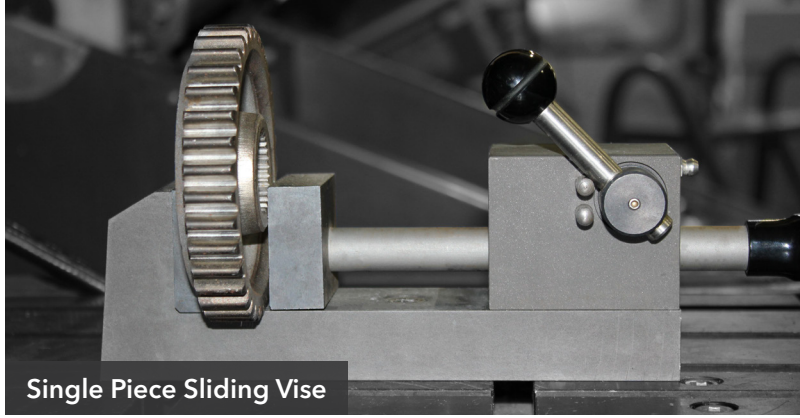
## What is the role of vising?

The main role of vising is to ensure the sample is secure and will not move during the cut. Abrasive sectioning can be an aggressive process where high forces may be applied to the sample. Proper vising will prevent sample movement while also presenting the sample in the optimal orientation for the sectioning process.

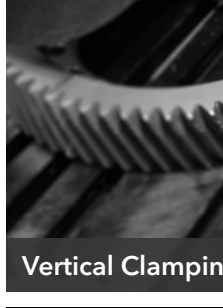
## Why is proper vising important?

Improper vising may allow the sample to move during the cutting process. This can lead to many issues including:

- Blade breakage
- Blade stalling
- Damaged samples
- Misaligned cuts
- Rework
- Increased Grinding & Polishing Times



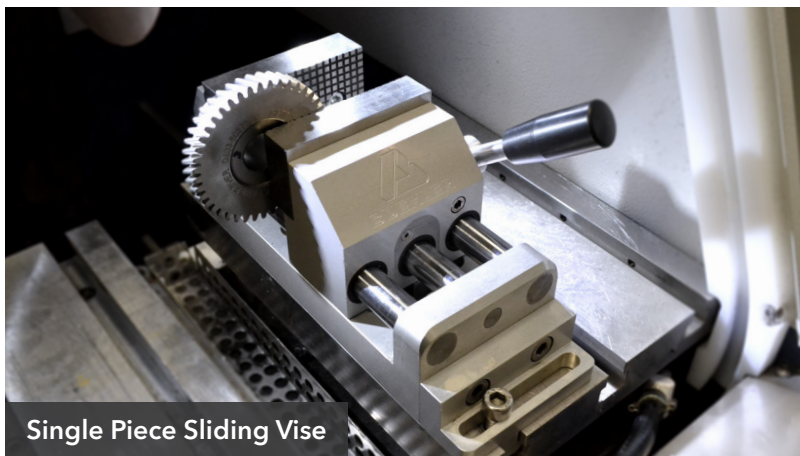
Single Piece Sliding Vise



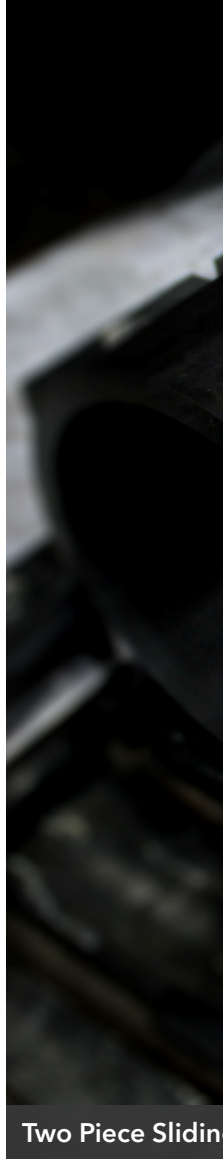
Vertical Clamping



Single Piece Sliding Vise



Single Piece Sliding Vise



Two Piece Sliding Vise

## Selecting the Right Vises

The ideal choice of vises depends on the needs of the lab. Some sectioning applications involve repeated sectioning of regularly shaped specimens and demand speed, while others involve clamping irregularly shaped samples and require flexibility.



Speed

VS



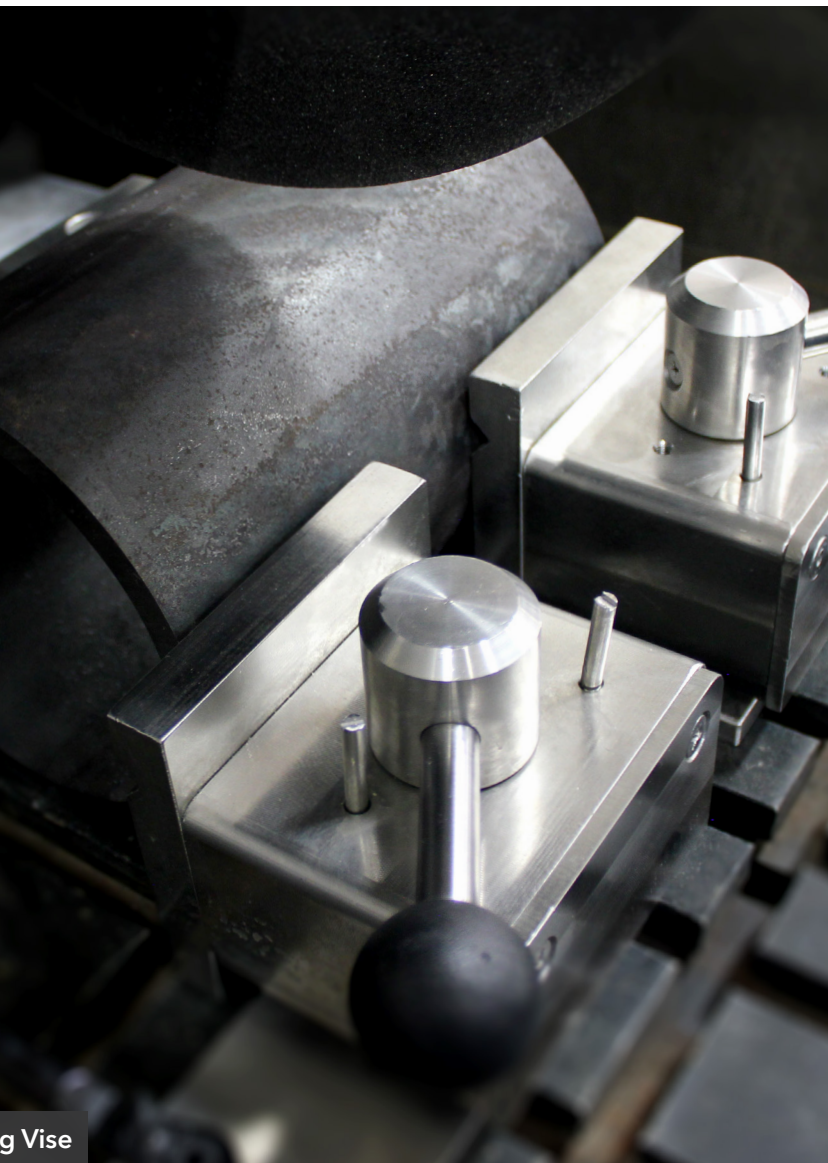
Flexibility



g Vise



Vertical Clamping Vise

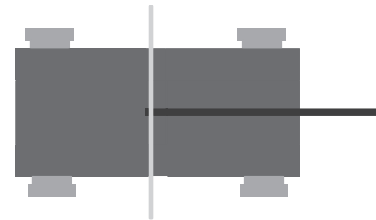


g Vise

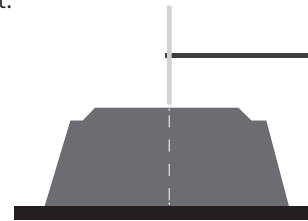
# Ensure Secure Clamping & Optimal Cutting

The following guidelines have been developed to ensure secure clamping of the samples and optimal sectioning results.

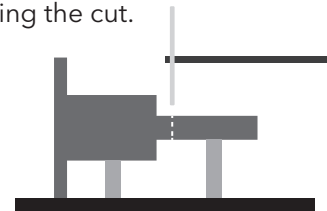
1. Align vises and sample to allow clamping on flat surfaces and provide multiple points of contact. Vise the sample on both sides if possible.



2. Start cuts on perpendicular surfaces to prevent blade movement.



3. Support sections of the sample that may bend or move during the cut.



Style	Speed	Flexibility	Application
Single Piece Sliding Vises	Best	Good	Clamping of regularly shaped samples for standard 90° cutting
Two Piece Sliding Vises	Better	Better	Clamping of larger, regularly shaped samples for standard 90° cutting
Vertical Clamping Vises	Good	Best	Flexible option for clamping of nearly all shapes and sizes
Specialty Vising Kits	Fair	Best	Specialized kits for intricate clamping and petrography

# Abrasive Vising Product Line

## Single Piece Sliding Vises

### Speed Clamping Vise



**Size:** Medium  
**Part Numbers:** Left: 10-3544  
 Right: 10-3545  
**Max Opening:** 2.75" [70mm]  
**Clamping Plate:** 3.2" x 1.4"  
 [80 x 35mm]  
**T-Nuts:** 12mm or 14mm

**Size:** Large  
**Part Numbers:** Left: 10-3546  
 Right: 10-3547  
**Max Opening:** 7.3" [185mm]  
**Clamping Plate:** 3.1" x 3.5"  
 [78 x 89mm]  
**T-Nuts:** 12mm or 14mm

### MetKlamp VIII



**Part Numbers:** Left: 95-C1821  
 Right: 95-C1822  
**Max Opening:** 3.125" [80mm]  
**Clamping Plate:** 1.75" x 2.25"  
 [45 x 58mm]  
**T-Nuts:** 12mm

## Two Piece Sliding Vises

### Sliding Vise Kit



**Size:** Medium  
**Part Numbers:** Left: 10-3540  
 Right: 10-3541  
**Clamping Plate:** 2.36" x 3"  
 [60x76 mm]  
**T-Nuts:** 12mm\*

**Size:** Large  
**Part Numbers:** Left: 10-3542  
 Right: 10-3543  
**Clamping Plate:** 2.95" x 4.23"  
 [74 x 107mm]  
**T-Nuts:** 12mm\*

\*14mm conversion kits are available  
 (Medium: 10-3548 | Large: 10-3549)

### MetKlamp VII



**Part Numbers:** Left: 10-2245  
 Right: 10-2246  
**Clamping Plate:** 2.3" x 3"  
 [59 x 76mm]  
**T-Nuts:** 14mm

## Vertical Clamping Vises & Accessories

### Vertical Clamping Kit



**Size:** Small  
**Part Numbers:** 10-3531  
**Clamping Height:** 2.3" [58mm]  
**Reach:** 2.1" [54mm]  
**T-Nuts:** 12mm

**Size:** Large  
**Part Numbers:** 10-3523  
**Clamping Height:** 4" [102mm]  
**Reach:** 2.4" [61mm] + 3.5" [90mm]  
 with extension (included)  
**T-Nuts:** 12mm

### Riser Blocks

Small: 10-3532; 2.4" [60mm]  
 Large: 10-3528; 2.9" [74mm]

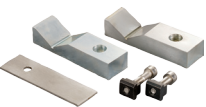


### Horizontal Clamp



### Vee Block Clamp Kit

10-3527



### Adjustable Vee Blocks

10-3525



## Specialty Vises

### Chain Clamping Kit



**Application:** For clamping very large or irregularly shaped samples  
**Part Number:** 46-0030

### Universal Clamping Kit



**Application:** For clamping very intricate samples  
**Part Number:** 10-3570

### PetroCut Vise Table & Rock Clamp Kit



**Application:** Converts the AbrasiMet 250 for petrographic cutting  
**Part Number:** 10-10106-000  
**Description:** PetroCut Vise Table & Rock Clamp Kit

**Part Number:** 10-10106-001  
**Description:** Rock Clamp Kit