

The primary purpose of mounting metallographic specimens is for convenience in handling specimens of difficult shapes or sizes during the subsequent steps of metallographic preparation and examination. A secondary purpose is to protect and preserve extreme edges or surface defects during metallographic preparation. The method of mounting should in no way be injurious to the microstructure of the specimen. Pressure and heat are the most likely sources of injurious effects.

The most common mounting method uses pressure and heat to encapsulate the specimen with a thermosetting or thermoplastic mounting material. Common thermosetting resins include phenolic (PhenoCure® resin), Diallyl Phthalate and epoxy (EpoMet® resin) while methyl methacrylate (TransOptic® resin) is the most commonly used thermoplastic mounting resin.

Castable mounting materials may require neither pressure nor external heat and are recommended for mounting specimens that are sensitive to heat and/or pressure. Acrylic resins, such as VariDur® and SamplKwick® resins, are the most widely used castable resins due to their low cost and short curing time. However, shrinkage can be a problem with acrylics.

### Compression Mounting Equipment Comparison Chart

		SimpliMet® 30 pg. 19	SimpliMet® 1000 pg. 19	SimpliMet® 3000 pg. 19
<b>Mold Size (Round)</b>	1"	■	■	■
	1.25"	■	■	■
	1.5"	■	■	■
	2"	■	■	■
	25mm	■	■	■
	30mm	■	■	■
	40mm	■	■	■
	50mm	■	■	■
<b>Manual or Automatic</b>	Manual	■	■	■
	Automatic	■	■	■
<b>Method Programmability</b>	Yes	■	■	■
<b>Controls</b>	Analog	■	■	■
	LCD	■	■	■