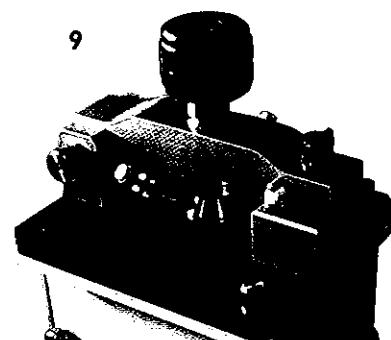
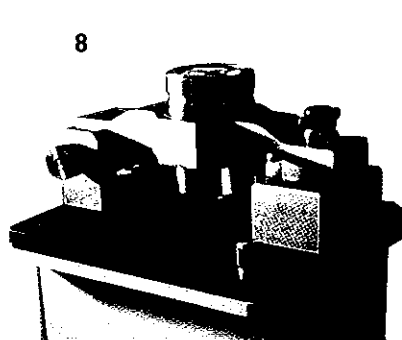
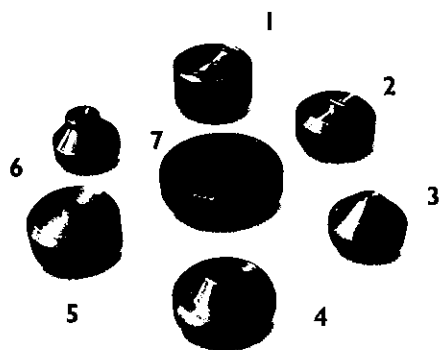


Anvil Options

A variety of special anvils exist for use with the Golden Gate Top-plates. The use of an appropriate anvil improves the

sample handling capabilities of the Golden Gate Single Reflection ATR System.



1 Reactive Sample Anvil

Samples which are sensitive to air or moisture can be loaded and pressed in a dry box. The anvil has a seal which compresses as the sample is pressed, thus keeping it in an inert environment during analysis.

2 & 5 Grooved Anvils (Narrow and Wide)

To study the coating on transformer wire the grooved anvils hold the wire exactly in the middle of the diamond.

3 Sapphire Anvil

This is the standard anvil and is used for most sample types. It has the advantage of being very hard, and easy to clean to prevent sample carry-over. It is also self-levelling to accommodate non-flat samples.

4 Stainless Steel Flat Anvil

This is used for fibers or fine wires. It is not self-levelling, which is an advantage with this type of sample.

6 Pellet Anvil

Polymer pellets are held firmly in position with this concave anvil. With a flat anvil they could move when pressure is applied.

7 Volatiles Cover

If liquid samples are very volatile the cover is useful to minimize evaporation.

8 View-Thru Anvil

The View-Thru Anvil allows the sample to be viewed through a 4x lens system with a built-in reflective illuminator. The lower window of the anvil acts as a viewing window so the sample may be positioned accurately and observed as pressure is applied. The anvil does not rotate as it presses on the sample, thus preventing movement of the sample and also minimizing any heating effects due to friction.

9 Flow-Thru Anvil

This micro flow cell anvil seals under pressure around the diamond. Its volume is 28 microlitres and it can operate at 1000 psi. The pipe flow fittings are 1/16" O.D. stainless steel. It may be used as a flow cell or as a micro reaction chamber in conjunction with the heated Golden Gate. It has also been used for the study of polymers in the presence of a supercritical fluid.