

ObducatAB NIL 2.5 Nanoimprinter



Process Description:

Nanoimprint is a method of lithography that is sometimes called soft lithography. This type of lithography allows for replications of micro-and nanometer range structures. Basically, the technique uses a mold to pattern nanoscale features. This system utilizes the embossing method. A master mold is mechanically pressed into the polymer to replicate the mold features.

Equipment Description:

The ObducatAB Nil 2.5 is capable of imprinting with a resolution of $\pm 10\text{nm}$ on any stamp and substrate size up to 65mm in diameter. This unit is loaded manually with no alignment capability. The heat and pressure process steps can be controlled manually from the unit panel or automatically with an interfaced computer program. The heater provides a uniform heat up to 250°C with $\pm 2\text{C}$ accuracy and is cooled by air. The maximum pressure is 1000 PSI.

<i>Materials Allowed</i>	<i>Materials Not Allowed</i>
To be determined	To be determined