Semiconductors Lithography basically means a process which involves various operations in order to prepare an Integrated Circuited. Three basic operations involved in semiconductors lithograpy are as follows

1. Etching
2. Deposition
3. Lithography

Etching is basically removing the unwanted material on the semiconductor using some chemical.

Deposition is nothing but digging the surface of the semiconductor and filling it with the required film.

Lithography is the base for both etching and deposition. It is responsible for scaling the size of the Integrated Circuit on the semiconductor surface.

These semiconductor lithographic systems are supplied by many companies around the globe among which ASML is the leading manufacturer in the market currently. As per the statistics the number of transistors on the IC are doubled every year and this is defined by a law named moore’s law. This process of lithography is also known as scanner system. With the modern scanner systems the possibilities of error is very minimum. In order to optimise the process ASML has come up with a system and a control mechanism. This system checks the wafer exposed to the scanner and the data collected is analysed by the control mechanism and the necessary adjustments are fed to the system if any for better productivity and repeatability.