Variable Shaped Beam Systems with high Throughput, Flexibility and excellent performance





Company

As a long-standing equipment supplier, Vistec Electron Beam GmbH is providing leading technology solutions for advanced electron-beam lithography. Based on the Variable Shaped Beam (VSB) principle, the electron-beam lithography systems are mainly utilized for: semiconductor manufacturing applications and advanced research as silicon direct write, compound semiconductor, silicon photonics, mask making as well as integrated optics and several new emerging markets. The company is located in Jena, Germany and maintains service and support centers in Europe, Taiwan and in the US.

Main products and services

Vistec Electron Beam GmbH designs, manufactures, sells, and services variable shaped electron-beam lithography systems. The main product lines are the Vistec SB254 with a 200mm platform and the Vistec SB3050-2 with a 300mm platform that are suited for various semiconductor and nanotechnology applications. Additionally we have a certified calibration laboratory for calibration measurements for length and position.

Strengths

In addition to its high flexibility and excellent electron patterning accuracy for different applications, this basic principle of Variable Shaped Beam lithography allows a shorter write time compared to other electron-beam writing principles as Gaussian beam technology. Furthermore, it is possible to write repetitive structural elements much faster by using more complex e-beam shapes, so called cells (Cell Projection), instead of homogeneous variable shapes. This leads to a further increase in writing speed.

Products for the UK Market

We would like to introduce our Variable Shaped Beam lithography systems – Vistec SB254 and Vistec SB3050-2.

Target clients

Advanced research institutes that collaborate with industry and have a need for reliable equipment with a high degree of automation and high throughput.

Production customers from the fields of semiconductor industry as compound semiconductor, mask write & direct write, photonics, and defense and areospace.

