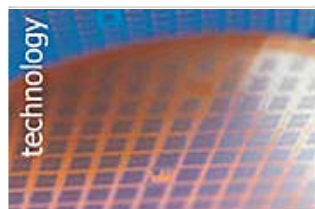
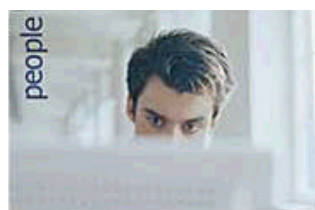




- COMPANY
- TECHNOLOGY
- NEWS
- CONTACT US



- PEOPLE
- TECHNOLOGY
- NEWS
- APPOINTMENTS



25th May 2004

Innos Ltd Invests Five Million Pounds To Upgrade Its Photolithography Capability

Southampton-based Innos Ltd, the UK's leading research and development company delivering expertise in Silicon, MEMS and nanotechnologies, today announced that it has invested five million pounds to upgrade its photolithography capability, including purchase of the UK's first JBX-9300FS electron-beam lithography system. The new equipment, installed at its 1000²m cleanroom in Southampton is part of Innos' strategy to provide a complete service to industry and academic institutions and maintain its leading-edge capability.

"The JBX 9300FS installation at Innos is the first unit of its kind in the UK, and will enable the next generations of nano-electronic devices to be produced, also allowing nano-technological research to prosper in the correct environment," explains the Senior General Sales Manager at JEOL UK Ltd, Roger Hockham.

CEO of Innos, Stephen Byars comments. "The investment in this system is a clear statement that Innos is taking a leading role in the UK's electronics research and development community."

The JBX-9300FS is a state-of-the-art system featuring a spot beam with a diameter of 4nm at 100kV, vector scan, and a step and repeat stage. It is capable of varying the beam size widely, with a guaranteed minimum linewidth of less than 20nm with overlay and stitching accuracies of comparable dimensions. "Even smaller linewidths down to 10nm have been reported to be possible with this tool," explains Byars. "Therefore, highly complex patterns with very fine geometries can be written in appropriate e-beam sensitive resists on to wafers with diameters up to eight inches."

Electron-beam lithography uses a focused electron beam to write ultra fine patterns on semiconductor substrates covered by a resist material.

The instruments are basically scanning electron microscopes designed for the extreme precision and stability required to write large and complex patterns with nanometer linewidths. The instruments are controlled by large computer systems able to convert CAD drawings into exposure sequences.

The system is versatile in its applications from basic research of elements to test production of optical elements to research and development for masks for high accelerating voltage exposure. Its dynamic correction system eliminates defocusing resulting from beam deflection.

Hockham adds, "The installation at Innos of the JBX 9300FS follows a number of successes in Europe recently as JEOL expands their Electron Beam Lithography tool business globally with equipment now sited in Japan, Asia, USA and Europe."

The system is currently in the final stages of installation and commissioning at Innos and acceptance tests are due to be completed by the end of June 2004.

[Back to News..](#)