

Operational Excellence: Beyond the Buzz Words

We'd like to share feedback on Varian's commitment to operational excellence.

A Malcolm Baldrige Award winner, Motorola, selected Varian ion implanters for their new MOS-11 fab, and told us why.

“It was essential that we select the best equipment available and that we establish a true partnership with the supplier to support the equipment in its manufacturing environment . . .

It was the quality programs you had implemented and your commitment to these that made a genuine impression. . .

Our equipment purchase agreement defined performance and testing standards that we believed would drive world-class fabrication capability . . .

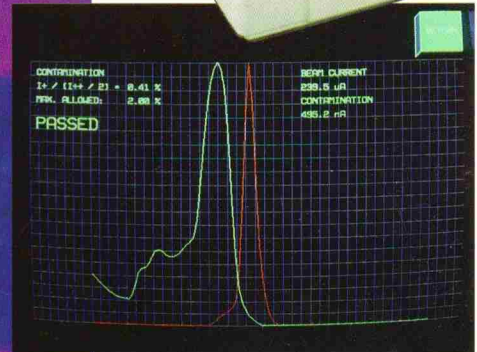
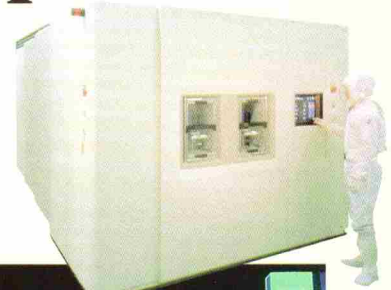
Recent successes in MOS-11 validate this commitment.”

It is interesting to note that from the outset of the relationship, Motorola expected Varian to maintain thorough statistical tracking of engineering functions and maintenance data. The testing of specific parameters *before* delivery eliminated surprises in the fab. Motorola could count on a quick start-up. And that's what was actually achieved.

Operational excellence flourishes at Varian. We have learned how to go beyond the buzz words.

Can we help you reduce your business risk and cut cost-per-bit with our superior systems and support?

New Two-in-One Ion Implanter



New E500 Ion Implanter automatically ensures beam purity before implantation.

Once again Varian is expanding process capability with a flexible, cost-effective tool.

The new E500 Ion Implanter performs *both* high energy and medium current implants. It is the most efficient system capable of processing wafers equally well in either range.

The E500 is based on the field-proven E220 medium current machine, the first designed to perform uniform implants across 200mm wafers. Now the E500 adds high energy capability up to 750 keV as well — all in the same small footprint that conserves cleanroom space.

As you know, implants from 200keV to 2MeV are typically performed on dedicated high energy machines. They're expensive, large, and limited in application. The E500 offers an alternative budget-wise solution. Indeed, it is the lowest-cost-per-implant system for high energy performance.

Performance

The E500 processes wafers with the tilt angles and rotation that have proved so effective in the E220. It also has solved the problems of energy contamination associated

with doubly charged ions in other high energy implanters. In this machine, measurement of beam purity is made *before* implanting begins. Beam purity levels are established in the software recipe, and an energy contamination interlock automatically provides process control in real time.

It is important to appreciate the significance of the computerized safeguard of beam purity. It ensures predictable and repeatable high energy performance.

Performance in the medium current range has also been improved. For some species, beam currents are almost double those of the E220 system, so that throughput is high and productivity increased.

The E500 is already on line in France and in Japan. Two magazines have run articles about the system, even before its formal introduction. If this implanter can contribute to your work, talk with your account manager or write for the E500 brochure. You'll learn about the most versatile production ion implanter in the world!