Driving Consumer Devices with Next-Generation TFMH Solutions

Hard disk drives for consumer applications such as TV set-top boxes, personal video recorders, digital cameras, auto navigation and music distribution systems are forecasted to experience 43% compound annual growth through 2007. Disk drive manufacturers are now ramping production of new 80GB platters and funding development of 120GB and beyond technology. The data storage industry continues to fund the development of new high density thin film head technology, increasing areal density by approximately 50% every year. In fact, the data storage technology roadmap is more aggressive than the semiconductor industry’s requirements for critical dimensions, film thickness, interface control and material selections.

More Solutions for Demanding Applications
Next-generation hard disk drives will require new magnetic materials, smaller dimensional tolerances and more automation in manufacturing.

Thin film magnetic head (TFMH) manufacturers will increasingly turn to Veeco for equipment and metrology solutions that lower their production costs, increase yields and enable them to stay ahead of their competition. Veeco has continued to be the world’s leading supplier of equipment to this industry by introducing new technologies, including next-generation etch, deposition and metrology.

Aii Extends Our Breadth
With our acquisition of Aii, we extended our product breadth to include lapping, slicing and dicing. Veeco now uniquely provides the broadest line of TFMH solutions to our customers. The Aii opportunity is particularly exciting for Veeco: Aii’s full-year 2003 sales were approximately $30 million, selling primarily one product (lapping) to one key customer. Veeco is currently introducing Aii’s advanced technology to our other key data storage customers and has already received positive response.

New Products Fuel Growth
In 2003 we also received customer acceptance of our new NEXUS IBD system and launched our NEXUS IBE system, which significantly increase yield on advanced thin film magnetic heads. The NEXUS design offers customers a cost of ownership advantage because its process modules are compatible with the installed base of Veeco deposition and etch cluster tools in the field. Veeco also sells a broad range of metrology, including: AFMs for atomic level resolution for wafer, rowbar and slider measurements; optical profilers for fast, non-contact measurements throughout production; magnetic test and defect inspection systems and slider curvature adjust systems to bring out-of-spec sliders into compliance for higher yields. Veeco’s advantages in data storage include our broad line of technology, the industry’s largest installed base (over 3,000 systems in the field), strong worldwide key account relationships and our vast service and support network.