
REVIEWED BY E. RABINOWICZ

Until recently, monographs in tribology generally covered the whole field, which of course made for a high degree of overlapping between the various books. Nowadays, a sizeable number of specialized books, which cover a proportion (often a small proportion) of all of tribology, have appeared. The book by Dr. Bharat Bhushan, *Tribology and Mechanics of Magnetic Storage Devices* is the epitome of this newer type of book, consisting of more than 1000 pages devoted to the tribology of magnetic recording devices.

The literature on the tribological aspects of magnetic recording, covering tapes, floppy disks and rigid disks consists to a large extent of some 150 papers in six STLE special publications, namely SP 16, 19, 21, 22, 25, and 26. Then there are about 1/3 that number in the IEEE MAG series, and the rest are scattered over the many journals and conference proceedings that cater to readers with varied interests in tribology. Dr. Bhushan has taken this large body of material, sorted it, rearranged it, and made it more accessible.

Many of the items in the book are quite hard to find elsewhere. For example, last year it took me an afternoon to find values for the Young’s moduli of common abrasives and common magnetic head materials, but in table 10.1 of this book the author has conveniently assembled this information.

Producing a book of this magnitude was surely a gigantic task. One consequence has been that the author has generally presented different points of view rather than giving a critical discussion. We must keep in mind that critical evaluation is a slow and laborious (and often unsuccessful) task, not lightly to be undertaken by one writing a long book in a very rapidly moving field. Another indication of rapid progress of the field lies in the fact that many significant topics have not found a place in the book. For example, little attention is paid to diskettes.

I have found very few mechanical errors in the book. However, the spelling of the Beilby layer, named after Sir George Beilby, is wrong wherever it occurs in the text, which is more often than the reference section would indicate.

I imagine that most people working on a tribological problem in magnetic recording will want to have the book readily available.

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