

TALK

SOUND

FROM THE MAKERS OF "SCOTCH" BRAND MAGNETIC TAPE

BULLETIN No. 20

REMANENT FLUX CURVES FOR MAGNETIC RECORDING TAPES

The curves shown below give typical values for the remanent flux in 1/4" wide magnetic recording tapes which have been subjected to various magnetizing fields. The three curves shown represent the following tape types:

| <u>Type B</u> | <u>Type BQ</u> |
|------------------|----------------------------|
| #101 Tape (RBB) | No. 101 Tape (2RBB) |
| #103 Tape | No. 111 Tape (5RBA) (6RBA) |
| #104 Tape | No. 109 Tape RBC |
| #111 Tape (4RBA) | |
| #114 Tape | <u>Type RR</u> |
| #115 Tape | #112 Tape (obsolete) |
| #116 Tape | |
| #117 Tape | |

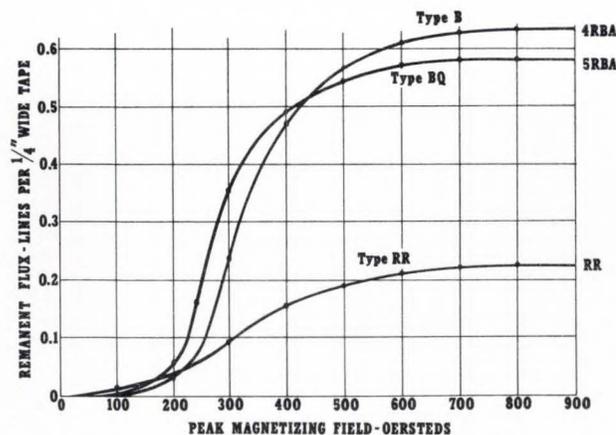
The curves should be of particular interest to design engineers and experimentors who may require such data for predicting the performance of recording devices. From them it is possible to determine the field intensities

necessary to magnetize the tape, and the amount of the resulting remanent flux. This data is in convenient form for direct calculations because the flux values are in terms of a single 1/4" wide tape rather than per unit cross sectional area of the coating.

It must be remembered that these curves represent static magnetic relationships, and it may not always be possible to apply them directly to dynamic recording problems.

The data for the curves was obtained with a 60 cycle dynamic B-H meter. The remanent flux was read from various unsaturated symmetrical loops, and these values plotted against the peak field intensity for each loop.

These curves are typical of the various tape types represented. Actual samples may differ from these values by about $\pm 10\%$ because of manufacturing tolerances.



Magnetic Products Division



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