

Modeling Of Magnetization Curves For Computer-Aided Design

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Summary

A simple algorithm is presented for obtaining the coefficients of the sine-series function for modelling the magnetization curves of magnetic materials. The algorithm, which can represent the fine details of the magnetization curve, can be easily implemented in mainframe computers and scientific programmable calculators, and can yield the coefficients of sine-series functions with any number of terms. Using the proposed algorithm, sine-series functions can be obtained for nearly rectangular magnetization curves with any required accuracy both in the high-flux and in the low-flux regions. The algorithm can be used for obtaining the Fourier components of an unfolded hysteresis loop

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