

A Research on the Mutual Influence between Magnetic Materials to Reduce Magnetic Signals of Warship



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Since warships are generally made of magnetic materials, magnetic signals are generated externally by the earth's magnetic field and internal magnetic field. In order to reduce these magnetic signals, magnetic fields are applied from the outside and inside to reduce various magnetic signals. In Previous studies, generally only one magnetic material was used for reduction of magnetic signals. However, since the warship is made up of various types of magnetic materials, they are mutually influenced by the applied magnetic field.

In order to analyze demagnetization for the warship, it is necessary to analyze the hysteresis characteristics and the magnetic interaction between materials. Therefore, in this study, the magnetic interaction between the ferromagnetic materials during the demagnetization process was analyzed using Preisach model.

Biography:

Sang Hyeon Im received the Ph.D degree in electrical engineering from Pusan National University, Busan, South Korea in 2020. From 2021 to now, he is an Assistant Professor with Dong Eui University, Busan.