

Influence of B content substituting for Al on the magnetic properties of $\text{Nd}_{60}\text{Fe}_{30}\text{Al}_{10-x}\text{B}_x$

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Abstract: The $\text{Nd}_{60}\text{Fe}_{30}\text{Al}_{10-x}\text{B}_x$ ($x = 0, 2, 4, 6, 8$ and 10) alloys were prepared by copper mold casting using arc-melting. Investigation shows that with increasing B content magnetization and remanence decrease while coercivity and Curie temperature increase. The hard magnetic properties are achieved not only in the amorphous state but also in partly crystallizing state. © 2002 Elsevier Science B.V. All rights reserved.

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