



## Development and Testing of an Axial Halbach Magnetic Bearing

By-

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. The NASA Glenn Research Center has developed and tested a revolutionary Axial Halbach Magnetic Bearing. The objective of this work is to develop a viable noncontact magnetic thrust bearing utilizing Halbach arrays for all-electric flight, and many other applications. This concept will help to reduce harmful emissions, reduce the Nation s dependence on fossil fuels and mitigate many of the concerns and limitations encountered in conventional axial bearings such as bearing wear, leaks, seals and friction loss. The Axial Halbach Magnetic Bearing is inherently stable and requires no active feedback control system or superconductivity as required in many magnetic bearing designs. The Axial Halbach Magnetic Bearing is useful for very high speed applications including turbines, instrumentation, medical systems, computer memory systems, and space power systems such as flywheels. Magnetic fields suspend and support a rotor assembly within a stator. Advanced technologies developed for particle accelerators, and currently under development for maglev trains and rocket launchers, served as the basis for this application. Experimental hardware was successfully designed and developed to validate the basic principles and analyses. The report...



## Reviews

Very beneficial for all type of folks. It can be rally intriguing through studying time. You will like how the writer publish this ebook.

-- Nathan Cruickshank

Totally one of the better pdf I have at any time read through. It really is simplified but shocks within the 50 % from the ebook. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Mariano Spinka