

基于弹载测速的微型磁通门集成系统研究

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基金项目：

摘要：

在介绍磁通门传感器基本工作原理的基础上，对磁通门如何应用于测量弹丸转数的原理及方法进行了分析。针对现有磁通门的一些不足，设计了微型化的磁通门探头及与之配套的电路，从而集成制作出传感器系统样机。对样机进行相关的试验并记录其输出信号的波形，对其计数后即可获得弹丸的转数，经验证，系统基本满足了弹丸初速测量的要求。

关键词：弹载测速；磁通门；计转数；传感器探头

Research on Micro-Magnetic Fluxgate Integrated-System Based on Projectile-Mounted Speed-Measured

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Abstract:

On the base that introduced basic principle of the fluxgate sensors, we analyze the principle and method of measuring the turns of pill. Aim at some lacks of fluxgate now, we design subminiature sensor-detector and relevant circuit, then do sensor system-model. After carry through correlative examination and register waveform of output signal, we can gain pill-turns by calculating the number, the system suffices the require of measuring muzzle velocity by validating.

Keywords: projectile-mounted speed-measured; fluxgate; turns-counting; sensor-detector

投稿时间：2010-03-31

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