

弹载加速度数据记录仪抗高冲击设计

作者：靳书云, 靳鸿, 张艳兵, 李跃武, 王欢

单位：中北大学

基金项目：

摘要：

针对弹载加速度数据记录仪在侵彻环境下受到高冲击力易变形或损坏导致测试失败的问题，提出弹载加速度数据记录仪两级保护结构，一级为高强度钢的机械外壳防护设计，二级为薄壁金属管填充泡沫铝的缓冲装置设计。通过实体弹侵彻3层混凝土试验，弹载加速度记录仪能够可靠存储并回读实验数据，证明了在10万g高冲击环境下记录仪的工作可靠性。

关键词：两级缓冲；抗高冲击；仿真；侵彻

Anti-impact design for missile accelerometer recorder

Author's Name:

Institution:

Abstract:

The data recorder secondary buffer protection structure is put forward For missile parameters recoder test failure due to deformation or damage in penetration high impact, Level 1 buffer is high strength steel mechanical shell, Level 2 buffer is aluminum foam Nested within the machine shell. Proves that the rationality and feasibility of the recorder in 100000 g high impact environment through recorder can store and read back the test data in penetrating 3 layers concrete target through simulation of foam aluminum and projectile penetration 3 layers of concrete.

Keywords: two buffer; anti-high impact; simulation; high impact; simulation

投稿时间：2014-02-27

[查看pdf文件](#)