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多模式聚能破甲战斗部技术研究 [\(PDF\)](#)

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Title: The Study on the Technique of Multimode Shaped Charge Warhead

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关键词: 多模式战斗部; 聚能装药; 多点起爆; 数值模拟

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摘要: 为了开发一种射流型多模式战斗部,使其穿深能力明显高于EFP,采用了90°铜药型罩聚能装药结构,不同起爆方式与炸高调节机制结合,使同一种聚能装药可分别形成长径比差异较大的长射流或杆式射流。试验表明,选择中心单点起爆与典型制式炸高结合,形成的杆式射流穿深较浅而开孔直径较大;选择环形多点起爆与有利炸高结合,形成的长射流穿深较高而开孔直径较小,不仅使两种聚能侵彻体的穿深能力具有明显差异,而且还可实现破甲·杀伤多用途。

Abstract: The purpose of the research is to develop a jet type multimode warhead with penetration depth higher than EFP warhead. The shaped charge with a right angle liner copper could form jet penetrator or the rod projectile with great difference of length diameter ratio by adjusting initiation mode and burst height. The experiment results indicate that the rod projectile makes large but shallow perforation under the condition of single point initiation and productive burst height, the jet penetrator makes small but deep perforation under the condition of the annular initiation and beneficial burst height. Not only the penetration ability of two shaped charge penetrators is distinct, but also the warhead produces multipurpose damage of the fragments.

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