

[1]薛鑫莹,景涛,李国邓.聚能装药钛合金药型罩研究[J].弹箭与制导学报,2012,5:83-86.

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聚能装药钛合金药型罩研究 [\(PDF\)](#)

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Title: Research on Titanium Alloy Liner of Shaped Charge

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关键词: 钛合金; 药型罩; 聚能射流; 钢筋混凝土

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摘要: 钛合金是一种新型药型罩材料, 依据药型罩成分均匀、晶粒细小的要求, 采用挤压精车工艺制备了钛合金药型罩。对材料进行了微观组织的金相观察和力学性能测试, 了解材料组织、性能。通过材料形成射流的数值仿真与闪光X射线照片的参数对比, 结合试验验证数据, 认为钛合金药型罩射流基本连续、准直, 可形成有效的聚能杀伤元, 在对钢筋混凝土的侵彻过程中, 既能保证较高穿深, 又具有较大的侵彻孔径, 有很好的应用前景。

Abstract: Titanium alloy is one of new material made of liner. we had made alloy titanium liner adopt a new technique, based on the requirement of uniformity and fine particle characteristic for liner. The new technique is extrusion and fine lathe. Observing metallographic and testing dynamo capability were carried out. Microstructure and properties of the material were understood by this method. Contrasting X radial photograph with numerical simulation results of the material bring jet and combining with experimental research, we draw a conclusion that titanium alloy can shape excellent jet, which can form large and deep aperture in the reinforced concrete. The material has excellent foreground in liner.

参考文献/REFERENCES

- [1]赵腾, 罗虹, 贾万明, 等.药型罩材料技术基本要素探讨[J].兵器材料科学与工程, 2007, 30(5): 77-82.
- [2]赵腾, 罗虹, 贾万明, 等.影响药型罩材料使用性能的因素研究[J].兵器材料科学与工程, 2007, 30(5): 82-86.
- [3]Marc Andre Meyers.材料的动力学行为[M].张庆明, 刘彦, 黄风雷, 等, 译·北京: 国防工业出版社, 2006.
- [4]李泉华·热处理实用技术[M]·北京: 机械工业出版社, 2006.
- [5]蔡杰·聚能射流侵彻钢筋混凝土结构动态响应研究初步[D]·南京: 南京理工大学, 2006.
- [6]Jiang Jianwei,Wang Liying,Men Jianbing.Numerical simulation of high performances haped charge penetrating concrete targets[J]. Journal of China Ordnance Society,2005 (1) : 46-48.
- [7]K G Cowan. Shaped charge warheads containing low melt eneygy metal liners[C]// 19th International Symposium on Ballistics, 2001, 583-590.
- [8]Century Dynamics Autodyn Theory Manual[M]. Century Dynamics, Inc,1986.

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