



国内外火炮身管延寿技术研究进展

2006-4-27 16:43:11 中国兵工学会

摘要: 火炮身管的烧蚀磨损一直是降低火炮寿命、制约火炮发展的一个难题。从提高身管抗烧蚀性能的角度出发, 归纳总结了近几十年来国内外火炮身管延寿的各种技术: 身管内膛激光热处理技术、复合身管制造技术及身管内膛涂层制备技术。并在分析火炮身管的结构特点和工作特点的基础上, 确定了一种比较理想的身管延寿技术。

关键词: 身管寿命; 激光热处理; 复合身管; 涂层

中图分类号: TJ301

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New Technologies to Extend the Erosion Life of Gun Barrel

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Abstract: The erosion and wear of gun barrel can reduce the gun barrel erosion life and re strict the gun development. The new technologies to extend the erosion life of g un barrel are summarized in this paper including laser heat treating of the inne r face of gun barrel, manufacturing of composite gun barrel and coating of the i nner face of gun barrel. Then every technology was studied according to the stru cture and principle of gun barrel. In the end, a suitable method to extend the e rosion life of gun barrel was proposed.

Key Words: gun barrel life; laser heat treatment; composite gun barrel; coat

发布人:sy

发布时间:2006年4月27日

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