



航空学报 » 2002, Vol. 23 » Issue (6) :568-570 DOI:

论文

最新目录 | 下期目录 | 过刊浏览 | 高级检索

<< Previous Articles | Next Articles >>

涡扇发动机炮式起动数学模型及起动特性研究

陈玉春¹, 陆尧¹, 王菊金², 陈宝延²

1. 西北工业大学航空动力与热力工程系, 陕西西安 710072; 2. 航天机电集团公司31所, 北京 100074

RESEARCH ON CARTRIDGE STARTING CHARACTERISTICS OF TURBOFAN ENGINE

CHEN Yu-chun¹, LU Yao¹, WANG Ju-jin², CHEN Bao-yan²

1. Dept. of Aeroengine Engineering, Northwestern Polytechnical University, Xi'an 710072, China; 2. The 31st Research Institute, Beijing 100074, China

摘要

参考文献

相关文章

Download: PDF (160KB) HTML OKB Export: BibTeX or EndNote (RIS) Supporting Info

摘要 利用发动机通用起动模型,并对通用起动模型中低压转子影响效应的考虑方法进行了改进与完善,通过对某型涡扇发动机起动过程的模拟计算结果与试验数据的对比表明,改进后的起动模型能很好地揭示影响该类型发动机炮式起动成功的主要因素,其中一些影响因素是通用起动模型不能够考虑到的。改进模型对采用炮式起动的其他航空燃气轮机的起动过程研究有一定参考价值

关键词: 涡扇发动机 炮式起动 火药起动器 起动特性

Abstract: The cartridge starting characteristics of the two spool turbofan engine were researched by computer simulation. A mathematical model is developed from the generalized model by modifying the method of accounting for the effect of the low pressure spool. Compared with the testing data, the simulation results can easily evaluate the main factors that affect the starting characteristics. The developed mathematical model is also useful for studying the starting characteristics of other types of gas turbine engines with cartridge starters.

Keywords: turbofan engine cartridge starting cartridge starter starting characteristics

Received 2001-10-29; published 2002-12-25

引用本文:

陈玉春;陆尧;王菊金;陈宝延. 涡扇发动机炮式起动数学模型及起动特性研究[J]. 航空学报, 2002, 23(6): 568-570.

CHEN Yu-chun; LU Yao; WANG Ju-jin; CHEN Bao-yan. RESEARCH ON CARTRIDGE STARTING CHARACTERISTICS OF TURBOFAN ENGINE[J]. Acta Aeronautica et Astronautica Sinica, 2002, 23(6): 568-570.

Service

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ Email Alert
- ▶ RSS

作者相关文章

- ▶ 陈玉春
- ▶ 陆尧
- ▶ 王菊金
- ▶ 陈宝延