



航空学报 » 1993, Vol. 14 » Issue (5) :225-229 DOI:

论文

[最新目录](#) | [下期目录](#) | [过刊浏览](#) | [高级检索](#)

[<<](#) | [后一篇 >>](#)

翼-身组合体绕流的Euler方程数值模拟

陈红全, 黄明格

南京航空航天大学6系, 南京 210016

NUMERICAL SIMULATION OF THE FLOW PAST WING-BODY USING EULER EQUATION

Chen Hong-quan, Huang Ming-ke

The 6th department, Nanjing University of Aeronautics and Astronautics, Nanjing, 210016

摘要

参考文献

相关文章

Download: [PDF \(436KB\)](#) [HTML](#) 0KB Export: [BibTeX](#) or [EndNote \(RIS\)](#) [Supporting Info](#)

摘要 用代数方法生成翼-身组合体H-O型网格,并用有限体积法研制出翼-身组合体绕流三维Euler方程计算程序。该方法的特点是改进了机身与机翼表面网格点分布,机翼后缘有后掠时也能保证后缘与网格线一致。程序除能按常规提供横流截面展向压强分布外,还能提供弦向压强分布。对NASA TND-712的翼-身组合体模型的计算结果与实验符合很好。

关键词: Euler方程 有限体积法 翼-身组合体 数值计算

Abstract: This paper gives H-O type grid generation and applies finite-volume method for wing-body flow. A 3-D Euler code for wing-body has been developed. We improve in this code the distribution of the number of the grid points over wing and body surfaces, and keep the trailing edge of the wing being one of the grid lines even when the edge has sweepback or sweep forward. The code developed can provide not only the spanwise pressure distribution as usual on cross-flow planes, but also the chordwise pressure distributions. The computation for NASA TN D-712 wing-body modd with the present code shows that the computed pressure distributions are in very good agreement with the experiment.

Keywords: Euler equation finite-volume method wing-body combination computation numerical

Received 1991-12-09; published 1993-05-25

引用本文:

陈红全;黄明格. 翼-身组合体绕流的Euler方程数值模拟[J]. 航空学报, 1993, 14(5): 225-229.

Chen Hong-quan;Huang Ming-ke. NUMERICAL SIMULATION OF THE FLOW PAST WING-BODY USING EULER EQUATION[J]. Acta Aeronautica et Astronautica Sinica, 1993, 14(5): 225-229.

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

- ▶ [陈红全](#)
- ▶ [黄明格](#)