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反应堆工程

CEFR Ⅰ-Ⅱ型栅板联箱截流件的数值模拟

冯预恒，胡文军，乔雪冬，侯志峰

中国原子能科学研究院 快堆工程部，北京 102413

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摘要 使用流体力学软件CFX对中国实验快堆（CEFR）的Ⅰ-Ⅱ型栅板联箱的流动阻力特性实验进行模拟计算。对比计算结果和实验数据，讨论和分析产生误差的原因，验证三维数值模拟计算的可靠性，校验同类计算，详细论述CFD技术与实验的关系，证明三维数值模拟计算的可行性与可靠性，为此后CFD技术在快堆设计的应用提供理论基础和计算依据。

关键词 栅板联箱 CFD 校验

分类号 TL33

Numerical Simulation for Ⅰ-Ⅱ Types of Distribution Header Throttle Structure in CEFR

FENG Yu-heng, HU Wen-jun, QIAO Xue-dong, HOU Zhi-feng

China Institute of Atomic Energy, P.O.275-95, Beijing 102413, China

Abstract In the simulation of distribution header throttle structure, using the computational fluid dynamic code-CFX, compared with experiment, the reasons of error were discussed and the reliability of this simulation was proved. Same types of calculations were checked, and the relationship between CFD and experiment was described. The results provide theoretic base and reference for CFD.

Key words distribution header throttle _ CFD _ check

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通讯作者