



航空学报 » 2001, Vol. 22 » Issue (3) :222-226 DOI:

论文

最新目录 | 下期目录 | 过刊浏览 | 高级检索

<< Previous Articles | Next Articles >>

### 开槽砂轮缓磨时射流冲击强化换热的研究

傅玉灿<sup>1</sup>, 徐鸿钧<sup>2</sup>

1. 中国科学技术大学力学和机械工程系, 安徽合肥 230027; 2. 南京航空航天大学505 教研室, 江苏南京 210016)

### STUDY ON ENHANCING HEAT TRANSFER WITH JET IMPINGEMENT IN CREEP FEED DEEP GRINDING WITH SLOTTED GRINDING WHEEL

FU Yu-can<sup>1</sup>, XU Hong-jun<sup>2</sup>

1. Mechanics and Mechanical Engineering Department, University of Science and Technology of China, Hefei 230027, China; 2. Faculty 505, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, China

摘要

参考文献

相关文章

Download: PDF (180KB) HTML 0KB Export: BibTeX or EndNote (RIS) Supporting Info

**摘要** 提出了运用磨削弧区强化换热技术开发高效磨削潜力的创新构想,并在开槽砂轮的基础上研制开发了能够实现磨削弧区沿砂轮径向定向高压水射流冲击强化换热的新型磨削液供液装置;完成了关于开槽砂轮缓磨时弧区定向高压水射流冲击强化换热效果的理论计算和实验研究,计算结果与实验结果基本吻合。

**关键词:** 缓磨 射流冲击 强化换热 开槽砂轮

**Abstract:** A creative conception is set up to exploit the potentialities of high efficiency grinding to great extent through enhancing heat transfer of the grinding zone, and a new grinding fluid providing device is put forward to enhance heat transfer of the grinding zone by the high pressure jet impingement. Furthermore, theoretical and experimental studies on the effect of the jet impingement are completed. The calculated results well correspond with the tested ones.

**Keywords:** creep feed deep grinding jet impingement augmentation of heat transfer slotted grinding wheel

Received 2000-01-10; published 2001-06-25

引用本文:

傅玉灿;徐鸿钧. 开槽砂轮缓磨时射流冲击强化换热的研究[J]. 航空学报, 2001, 22(3): 222-226.

FU Yu-can; XU Hong-jun. STUDY ON ENHANCING HEAT TRANSFER WITH JET IMPINGEMENT IN CREEP FEED DEEP GRINDING WITH SLOTTED GRINDING WHEEL [J]. Acta Aeronautica et Astronautica Sinica, 2001, 22(3): 222-226.

#### 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

- ▶ 傅玉灿
- ▶ 徐鸿钧