Accepted Manuscript

Experimental Study of Direct Contact Condensation of Steam Jet in Water Flow in a Vertical Pipe with Square Cross Section

Saman Zare, Mohammad Hossein Jamalkhoo, Mohammad Passandideh-Fard

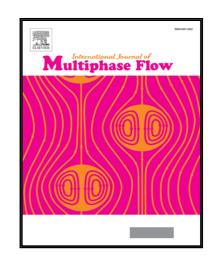
PII: \$0301-9322(17)30082-4

DOI: 10.1016/j.ijmultiphaseflow.2018.03.009

Reference: IJMF 2764

To appear in: International Journal of Multiphase Flow

Received date: 7 February 2017 Revised date: 14 February 2018 Accepted date: 7 March 2018



Please cite this article as: Saman Zare, Mohammad Hossein Jamalkhoo, Mohammad Passandideh-Fard, Experimental Study of Direct Contact Condensation of Steam Jet in Water Flow in a Vertical Pipe with Square Cross Section, *International Journal of Multiphase Flow* (2018), doi: 10.1016/j.ijmultiphaseflow.2018.03.009

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- An experimental investigation of DCC of steam jet in water flow was performed.
- Three main steam plume regimes (chugging, stable, and oscillatory) was identified.
- A three-dimensional regime map was introduced based on experimental data.
- Steam mass flux was found to be the most effective parameter on this phenomenon.
- Empirical correlations for the stable regime of the steam plume were suggested.



Download English Version:

https://daneshyari.com/en/article/7060093

Download Persian Version:

https://daneshyari.com/article/7060093

<u>Daneshyari.com</u>