STP 1534
Film and Nucleate Boiling Processes

Table of Contents

A Volume of Fluid Phase Change Model on Adaptive Octree Grids—M.W. Akhtar, S. Kleis

CFD-Simulation of Film Boiling at Steel Cooling Process—T. Kulju, J. Pyykkone, D.C. Martin, E. Muurinen, R.L. Keiski


Modeling and Simulation of Film and Transitional Boiling Processes on a Metallic Cylinder During Quenching—P. Stark, U. Fritsching

Correlation Between Chemical Composition of Steel, Optimal Hardened Layer and Optimal Residual Stress Distribution—N.I. Kobasko

Duration of the Transient Nucleate boiling Process and its Use for the Development of New Technologies—N.I. Kobasko

Effect of Accuracy of Temperature Measurements on Determination of Heat Transfer Coefficient During Quenching of Liquid Media—N.I. Kobasko

Intensive Quenching of Steels Parts and Tools in Water Salt Solutions of Optimal Concentration—N.I. Kobasko, A.A. Moskalenko, V.V. Dobryvechir, L.M. Protsenko

Microstructure and Hardness Prediction at the Core of Steel Parts of Any Configuration during Quenching—N.I. Kobasko, S.E. Guseynov


Heat Transfer Stages Recognition by Boiling Acoustic During Quenching—F. Ravnik, J. Grum

Boiling Heat Transfer: An Overview of Longstanding and New Challenges—G. Shekriladze, I.G. Shekriladze


Forced Convective Boiling of Ethylene Glycol/Water Mixtures Inside a Small Tube—W. Yu, D.M France, J.L. Routbort

Bubble Dynamics and Heat Transfer in Pool Boiling on Wires at Different Gravity—J. Zhao, S. Wan