

2007 — MOCHIZUKI Masahito

Scientific Papers/Commentary Articles

1. M. Mochizuki, Control of Welding Residual Stress for Ensuring Integrity against Fatigue and Stress-Corrosion Cracking, Nuclear Engineering and Design, Vol. 237, Iss. 2, pp. 107-123, 2007
2. M. Mochizuki and M. Toyoda, Weld Distortion Control during Welding Process with Reverse-Side Heating, Transactions of the ASME, Journal of Engineering Materials and Technology, Vol. 129 No. 2, pp. 265-270, 2007
3. R. Higuchi, M. Mochizuki and M. Toyoda, FEM-MD Combined Method for Investigation on Effects of Microscopic Heterogeneity near Weld Zone on Strength Characteristics, Welding in the World, Vol. 51, Iss. 7/8, pp. 29-34, 2007
4. M. Mochizuki and M. Toyoda, Strategy of Considering Microstructure Effect on Weld Residual Stress Analysis, Transactions of the ASME, Journal of Pressure Vessel Technology, Vol. 129, No. 4, pp. 619-629, 2007
5. M. Mochizuki, Y. Mikami, H. Yamasaki and M. Toyoda, Elastic Predicting Method of Weld Distortion of Large Structures Using Numerical Simulation Results by Thermal-Elastic-Plastic Analysis of Small Components, Welding in the World, Vol. 51, No. 11/12, pp. 60-64, 2007
6. M. Mochizuki, Y. Mikami, and M. Toyoda, Study on Metallurgical and Mechanical Heterogeneity in Weld Materials Considering Multiple Heat Cycles and Phase Transformation, Mathematical Modelling of Weld Phenomena 8, Edited by H. Cerjak, TU Graz Publishing, Graz, Austria, pp. 287-294, 2008
7. Y. Mikami, M. Mochizuki and M. Toyoda, In-Process Control of Weld Distortion by Using Phase Transformation Effects, Mathematical Modelling of Weld Phenomena 8, Edited by H. Cerjak, TU Graz Publishing, Graz, Austria, pp. 981-1001, 2008

International Conference Proceedings

1. M. Mochizuki, H. Shirai and M. Toyoda, Microscopic Deformation Behavior of Small-Diameter Pipe by Laser Welding, Proceedings of the 5th German-Japan Seminar on Materials, Processes and Components, Fraunhofer Institute for Mechanics of Materials, Freiburg, Germany, No. S5-2, 2007
2. M. Mochizuki, R. Higuchi, Y. Mikami and M. Toyoda, Evaluation of Heterogeneity of Microscopic Deformation and Stress Distribution in Steel and Its Weld by FEM-MD Coupling Simulation, 60th Annual Assembly of the International Institute of Welding, Dubrovnik-Cavtat, Croatia, IIW Doc. X-1617-2007, 2007

3. H. Shirai, M. Mochizuki and M. Toyoda, Reduction of Welding Deformation by Split Laser Beams in Automobile Parts, 60th Annual Assembly of the International Institute of Welding, Dubrovnik-Cavtat, Croatia, IIW Doc. X-1618-2007, 2007
4. S. Okano, M. Mochizuki and M. Toyoda, Temperature Distribution for Reduction of Angular Distortion by In-process Control Welding, 60th Annual Assembly of the International Institute of Welding, Dubrovnik-Cavtat, Croatia, IIW Doc. X-1619-2007, 2007
5. M. Mochizuki, S. Okano, H. Shirai, Y. Hirata and M. Toyoda, Appropriate Molten Pool Configuration from a Viewpoint of Weld Distortion Control, 60th Annual Assembly of the International Institute of Welding, Dubrovnik-Cavtat, Croatia, IIW Doc. XII-1925-2007, 2007
6. K. Mitani, M. Mochizuki and M. Toyoda, Study on Thickness and Actual Stress Measurement of Steel Structures Using Electromagnetic Acoustic Transducer, Proceedings of the 2007 ASME Pressure Vessels and Piping Conference, American Society of Mechanical Engineers, San Antonio, U. S. A., PVP2007-26460, 2007
7. M. Mochizuki, R. Higuchi, J. Katsuyama and M. Toyoda, Evaluation of Strength Characteristics Considering Microscopic Heterogeneity of Structural Steels and Weld Zone by Using FEM-MD Coupling Method, Proceedings of the 2008 ASME Pressure Vessels and Piping Conference, American Society of Mechanical Engineers, San Antonio, U. S. A., PVP2007-26573, 2007
8. J. Katsuyama, W. Asano, K. Onizawa, M. Mochizuki and M. Toyoda, Crack Growth Analyses of SCC under Various Residual Stress Distributions near the Piping Butt-Welding, Proceedings of the 2009 ASME Pressure Vessels and Piping Conference, American Society of Mechanical Engineers, San Antonio, U. S. A., PVP2007-26574, 2007