Graphical Characterization of Pulse GMAW Parameter Performance

Twin Wire GMAW-P on Thin Gage 409 Stainless Steel

No Lights, No Cameras, No Contact: Fringing Field Seam Tracking

Transient Thermal Tensioning for Control of Buckling Distortion

Finite Element Analysis and Measurement of Residual Stresses in a Multi-Pass Repair Weld with Temper-Bead Technique

Analysis and Proof of Hot Strain Behavior During Welding

Distortion Analysis and Control in Welding Assembly of Thin-Wall Tubular Frames

Proof-Loading Effects on Residual Stress Redistributions in Seam-Welded High-Strength Steel Line Pipes

Ferrite Number Prediction that Includes Cooling Rate as a Variable

Development of a Primary Solidification Diagram for Pulsed Laser Welding of Austenitic Stainless Steels

In-Situ Observations of Phase Transformations in Duplex Stainless Steel Weldments Using Synchrotron Radiation

Solidification Behavior of Fusion Welds in Gadolinium Enriched Stainless Steels for Storage of Spent Nuclear Fuel

Effect of Enhanced Buoyancy Convection on the Weld Microstructure

Optimization of Laser Direct Metal Deposition Process Parameters

Geometry of Laser Spot Welds from Dimensionless Numbers

Impacts of Canceling Shielding Gas in Nd:YAG Laser Welding

CO$_2$ Laser-Plume Interactions in Welding

Correlation Between Grain Boundary Character and Grain Boundary Liquation in the Weld Heat-Affected Zone

Development of a Gleeble Based Test for Postweld Heat Treatment Cracking Susceptibility

The Effect of Multiple Postweld Heat Treatment Cycles on the Weldability of Waspaloy

Investigation of Stress-Relief Cracking Susceptibility in a Modified Cr-Mo Steel Using High Resolution TEM Techniques

The Use of Analytical Electron Microscopy to Evaluate Fusion Boundary Microstructure Evolution in Zr- and Sc-Bearing Aluminum Alloys

Improving Columnar-to-Equiaxed Transition During Solidification of Welds

Partially Melted Zone in Aluminum Welds - Solute Segregation and Mechanical Behavior

Grain Boundary Liquation in Aluminum Welds - Planar and Cellular Solidification of Liquated Material

Joining High-Strength Aluminum to Depleted Uranium Using an Explosively Clad Niobium Interlayer

Effect of Electrode Overcoating on the Enhancement of Underwater Wet Welding

An Evaluation of the Relative Hydrogen Cracking Risk of FCAW-S on High Strength Pipe

Hydrogen Control in Steel Weld Metal by Means of Fluoride Additions in Welding Flux

Single-Pass Arc Welding of Heavy Section Materials

Micro-Texture Analysis in Friction-Stir-Weld of 6063 Aluminum
Determination of Load, Torque, and Tool Temperature During Friction Stir Welding of Aluminum Alloys
From Plastic Slip Zone to Stir Flow Zone - A Proposed Friction-Stir Weld Formation Mechanism
Pore Formation During Laser Welding of Magnesium and Aluminum Alloys - Mechanisms and Remedies
Effect of Magnesium Content on Nd:YAG Laser Welding of Aluminum-Magnesium Alloys
Flux-Assisted GTA Welding of Magnesium Alloys
The Use of Active Fluxes During Welding of Gamma TiAl Alloys
Fusion Welding in Ni-Mo Alloys
TRXRD Observations of Microstructural Evolution in Self-Shielded Flux Cored Arc Weld Deposits
Microstructural Characterization of Low Alloy Steel Welds Containing Yttrium
The Effect of Mo on High Strength Ferritic SMAW Deposits
Modeling Simultaneous Formation and Growth of Inclusions in Low Alloy Steel Welds
Weld Shapes in Hyperbaric GTAW of Stainless Steel
Process Characterization and Development of a Percussive Arc Weld
Laser Welding of Quartz
The Practical Analysis of Welding Processes Using Finite Element Analysis
A Probabilistic, Semi-Empirical Approach to Modeling Diffusion Bond Strength
Eliminating Post-Process Inspection of Inertia Friction Welds Through In-Process, Quality-Based Monitoring
Reduced Order Heat Generation Model for Inertia Welded Dissimilar Tubes
Grain Boundary Character Distribution in OFE Copper and Its Influence on Weldability
Inertia Friction Welding Ti 6Al-4V to Alloy 625
Structure/Property Relationships in Multipass GMA Welding of Beryllium
Fabrication of Metal Matrix Composites via Laser Engineered Net Shaping
Fabrication of Hiperco Alloy 50/304L Stainless Steel Structures
A “Genetic Analysis” of High Performance Welding Education Programs
Basic Titanium Welding
Application of Titanium
Mechanized Welding of Titanium Alloys
S.E.N.S.E. Program Update
The Art of Welding
The Education and Training of Welders in Ireland
The Challenges for Welder Training in Developed and Developing Countries
Why We Use Titanium in Medical Implants
2205 Duplex Stainless Steel
GTAW Applied 510330 (320XY) Hardfacing
Magnetic Flux Leakage for Pipeline Metal Loss Inspection
Duplex 2205
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