

Iron & Steel Technology

2009 Index

List of Titles

AIST News

2008 John F. Elliott Lecture Series Report — Aug., p 115
2008–2009 Member Chapter Officers — Jan., p 132
2009 AIST Award Recipients — July, p 103
2009 AIST Executive Officers and Board of Directors — June, p 36
2009 FeMET Initiative Grant Winners — Oct., p 37
2009–2010 AIST Foundation Board of Trustees — Oct., p 24
2009–2010 AIST Foundation Scholarship Winners — Oct., p 27
AIST 50-Year Life Member Norman L. Samways — Nov., p 123
AIST Life Member Harold Emerick Celebrates 65 Years of Membership — May, p 302
AIST Life Member Robert Shelley — Aug., p 137
AIST Membership Recognition for 2008 — Apr., p 173
AISTech 2009 Conference and Exposition Information — May, p 32
AISTech 2009 Conference and Exposition Preliminary Information — Jan., p 99; Feb., p 85; March, p 97; Apr., p 65
AISTech 2009 Conference and Exposition Review — Aug., p 27
AISTech 2009 President's Award Breakfast Keynote Address — July, p 95
AISTech 2010 Booth Reservation Form and Exposition Floor Plan — Oct., p 135; Nov., p 101
AISTech 2010 Call for Papers — June, p 95; July, p 123; Aug., p 125
Call for Applications: 2009–2010 AIST Foundation Scholarships — Jan., p 30; Feb., p 26; March, p 24; Apr., p 28
Call for Entries: AIST 2009 Energy Achievement Awards — May, p 281; June, p 102
Call for Entries: AIST 2009 Project Excellence Award — Sept., p 105
Call for Entries: AIST 2009 Reliability Achievement Awards — Jan., p 119; Feb., p 125; March, p 236; Apr., p 148; May, p 275
Call for Nominations: 2010 AIST Awards — July, p 118; Aug., p 116; Sept., p 126; Oct., p 138
Interview With Anthony R. Bridge, 2009 AIST President, An — J. Cantrell, June, p 34
Interview With Gianpietro Benedetti, Chairman and Chief Executive Officer, Danieli, An — J. Cantrell, Feb., p 116
John J. Ferriola: 2009 Steelmaker of the Year — J. Cantrell, Oct., p 42
Letter From the AIST President, A — Jan., p 3; Oct., p 98
MS&T'09 Conference and Exhibition Information — Oct., p 99
MS&T'09 Conference and Exhibition Preliminary Information — Sept., p 71
Why It Pays to Be a Leader: AIST 2008 Membership Survey Results — S. Varmecy, March, p 252

Technical Articles

"25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio" — M. Lantz, D. Hassenzahl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

A

"AC Drive Cable Selection" — R. Tessorodorf, H. Hosoda, K. Fukuma, S. Kodama and T. Ishida, Dec., p 49

"Advancements in Steel for Weight Reduction of P900 Armor Plates," *AIST Transactions* — R.A. Howell, J.S. Montgomery and D.C. Van Aken, July, p 167
"Air Permitting in the Steel Industry — Dodging Potholes in a Deteriorating Road" — R. Geddis, Apr., p 149
"Application of Low-Volume Lubrication and Liquid Nitrogen in the Final Stand of a Tandem Cold Mill" — H. Pawelski and H-P. Richter, Aug., p 57

B

"Bearing Repair Provides Valuable Alternative to Bearing Replacement for Heavy Industries" — K. Flowers, June, p 85

C

"Chlorine Behavior of Coal and Waste Plastics During Carbonization" — K. Kato, S. Nomura, K. Fukuda and H. Uematsu, March, p 90
"Choosing the Correct Front-End Technology for a Low-Voltage AC Drive System" — D.J. Kosnik, Jan., p 87
"Construction of a Web-Based Tutorial for 3-D Visualization of Ternary Phase Diagrams" — H. Abramowitz, J. Ye, D. Xu, E. Johnsen, T. Hagen, W. Zhao and M.A. Roller, Oct., p 75
"Contamination Control Pays Big Dividends" — A.L. Kastonek, Dec., p 44
"Control of Gas Bubbles and Slag Layer in a Ladle Furnace by Electromagnetic Stirring" — U. Sand, H. Yang, J-E. Eriksson and R. Bel Fdhila, July, p 49
"Corrosion: Cause, Effect and Control" — J. Gleason, Apr., p 34

D

"Delayed Cracking and Safety Considerations for Forged Steel Work Rolls" — W.J. Hill, Apr., p 57
"Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The" — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37
"Development of a New Solid-State Joining Process for Endless Hot Rolling" — J-S. Lee, Y-H. Kang, C-S. Won, S-L. Son and K. Horii, Aug., p 48
"Development of Amorphous-Alloy Film Coating Using the New Technique of Thermal Spraying," *AIST Transactions* — R. Kurahshi, N. Nagao, M. Komaki, K. Hakomori and M. Kouzaki, June, p 139
"Development of an Energy Conservation Program at Severstal North America Inc." — T. Obrecht, A. Thomas and S. Turcotte, May, p 248
"Development of High-Performance Steels for Bridge Applications at SSAB North America" — D. Bai, T. Nelson, R. Bodnar, M. Cooke and S. Scumpu, Oct., p 65

E

"EAF Energy Optimization at Nucor-Yamato Steel" — O. Quintanilla and G. Fernandez, Jan., p 78
"Effect of MnS Distribution on Machinability in Low-C Lead-Free Free-Cutting Steel" — M. Hashimura, A. Mizuno and K. Miyanishi, Sept., p 45
"Emerging Technology: AC Sourced Magnet Control" — T.R. Creech, June, p 63
"Energy Savings Through Improved Skid Insulation Materials and Techniques on Steel Reheat Furnace Skid Systems" — D. Toocheck and W. Sipich, May, p 260

- “Enhancing the Operation of Highly Varying Industrial Loads to Increase Electric Reliability, Quality and Economics” — R.A. Kramer, R. Shoureshi and E. Arnold, May, p 239
- “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies” — V. Sahajwalla, R. Khanna, M. Zaharia, S. Kongkarat, M. Rahman, B.C. Kim, N. Saha-Chaudhury, P. O’Kane, J. Dicker, C. Skidmore and D. Knights, Apr., p 43
- “Experience With an Innovative On-Line Inclusion Determination System for Liquid Steel” — R.P. Stone, C.C. Liu and P.C. Glaws, July, p 42

F

- “Fixed vs. Floating Rail Arrangements” — R. Milman and C. Hoppel, June, p 68
- “Further Developments in Wire Rod and Bar Production Using 3-Roll Technology” — S.A. Filippini and W.J. Ammerling, Sept., p 38
- “Further Process Improvements at Severstal Sparrows Point via New Technology Implementation — Moving the Bottlenecks” — R.P. Stone, D. Patterson, D. Neith, S. Koester and R.V. Branion Jr., Nov., p 54

H

- “High Productivity With Low Emissions — Challenge for Tomorrow” — T. Rummler, J. Apfel, V. Knoth, J. Belous and T. Doninger, Feb., p 78
- “HiSmelt® Technology: The Future of Ironmaking” — T. Leczo, March, p 33
- “Hot Metal Strategies for the EAF Industry” — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31
- “Hydrogen and Nitrogen Control in Steelmaking at U. S. Steel” — S. Misra, Y. Li and I. Sohn, Nov., p 43

I

- “Improving Caster Hydraulics Reliability and Reducing Costs With New Synthetic, Fire-Resistant Fluid” — R. Brousseau and T. Vasiliw, Dec., p 65
- “Improving the Quality of Steel Slabs and Billets With Additional Electric Heating Elements” — K.M. Tiitto, J.M. Pyykkonen and P.T. Mantyla, Sept., p 52
- “Inclusion Characterization: A Tool for Measurement of Steel Cleanliness and Process Control” — P. Kaushik, H. Pielet and H. Yin, Nov., p 82
- “Innovative Offgas Cleaning and Recovery Solutions for Steelmaking” — K. Jamek, Nov., p 61
- “Insight Into Steel Consumption in India” — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20
- “Integration Technology at ArcelorMittal Dofasco Inc.” — B. Barna, Jan., p 37
- “Investigation Into the Effects of Leveling Roll Diameter Variation on Coupling Shear Pin Breakage of a Hot Plate Leveler” — Y. Liu and M. Levick, Aug., p 82
- “Investigation of Hot Metal Desulfurization by Mg, An” — Q. Liu, H. Pielet, P. Kaushik and B. Chukwulebe, Nov., p 75

L

- “Latest Developments in SBQ Cold Processing and Finishing” — S. Lodolo and S. Casco, Sept., p 59
- “Literature Review of Age Hardening Fe-Mn-Al-C Alloys, A” *AIST Transactions* — R.A. Howell and D.C. van Aken, Apr., p 192
- “Low-Temperature Oxidation on Magnesia Carbon Brick” — Y.M. Lee, Nov., p 70

M

- “Magnesium Vapor Loss in Offgas of Hot Metal Desulfurization Process by Magnesium Injection,” *AIST Transactions* — H. Sun, Y.C. Liu and M-J. Lu, Oct., p 173
- “Mechanism of Post-Rolling Deterioration in Hot Band Flatness During Coiling, A” — E. Nikitenko and B.C. Gris, Oct., p 60
- “Mechanisms of Work Roll Degradation in Hot Strip Mills” — G. Walmag, X. Vanden Eynde, M. Sinnaeve and V. Lecomte, Aug., p 66

- “Medium Voltage Drive Application at U. S. Steel Lorain Tubular Operations, No. 3 Seamless Mill” — M.A. DeCarli and R.M. Baker, Jan., p 47
- “Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications” — D. Maldonado, P.R. Austin, P. Zulli and B. Guo, March, p 50
- “Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills” — A. Angerbauer, B. Haring and R. Burger, May, p 267
- “Mold Level System Upgrade at ArcelorMittal Dofasco’s No. 1 Caster” — C. Singh, X. Rabec and M. Dussud, July, p 75

N

- “New Techniques in Steel Meltshop Air Pollution Control” — C.J.L. Els, O. Vorster, C. Coetzee and T.L. Fisher, Feb., p 65
- “New Technology for Hot Mill Coil Conveyors” — C. Brockway, June, p 75
- “Nucor Memphis SBQ Steel Mill” — T.J. Leczo, Nov., p 31
- “Nucor Steel Seattle: Improvements Resulting From the Modernization of the 4-Strand Billet Caster” — J. Gregord, July, p 33

O

- “Old Pickling Lines Get New Life With Plastic Tanks” — T.L. Fitzpatrick and W.H. Pugh, Dec., p 58

P

- “Plant Vehicles Tracking With GPS-DGPS-GPRS Technologies” — C. Iorizzo, L. Speranza and A. Lenardon, Jan., p 58
- “Prediction of Blast Furnace Hearth Inner Profiles” — L. Zheng, R. Deshpande, C.Q. Zhou, D. Huang and P. Chaubal, March, p 83
- “Primary Energy Melting (PEM) — A Hybrid Process Using an Energy-Efficient Technology” — J. Schlüter, U. Falkenreck, J. Kempken and J. Bader, Feb., p 47
- “Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

Q

- “Quality Aspects of HPH® Annealed Steel Strip” — R. Fielder, P. Wendt and F. Maschler, Jan., p 69

R

- “Recent Developments in Strand Condition Monitoring Devices” — A.I.F. Leek, July, p 84
- “Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process” — D.G. Edelman, P.C. Campbell, C.R. Killmore, K.R. Carpenter, H.R. Kaul, J.G. Williams and W.N. Blejde, Oct., p 47
- “Role of Axial Cyclone in Recycling of Blast Furnace Offgas Cleaning System Solid Wastes” — N. Ma, H.R. Kokal and J. Flannery, March, p 76

S

- “Safety and Efficiency Improvements Using Digital DC Controls” — A. Thexton, June, p 45
- “Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation” — B. Edwards, A. Cheng, S. Street, B. Ebner and L. Hausemer, March, p 65
- “SIMETAL Ultimate at Colakoglu, Turkey, The” — M. Abel and M. Hein, Feb., p 56
- “Solving the Insoluble: Electrolytic Tinning Lines With Insoluble Anodes” — G. Astengo and T. DeLoia, Aug., p 75
- “Start-Up Experience and Results of Consteel® at the SOVEL Meltshop” — G. Bouganosopoulos, V. Papantoniou and P. Sismanis, Feb., p 38
- “Steel Scrap Haulage: A Look at How Advances in Rear-Eject Technology Have Enhanced and Streamlined the Steelmaking Process at Minimills” — J. Swank and L. Hagenbuch, June, p 54
- “Suspension Reduction Technology for Ironmaking With Low CO₂ Emission and Energy Requirement,” *AIST Transactions* — H.Y. Sohn, M.E. Choi, Y. Zhang and J.E. Ramos, Aug., p 157

T

- "Thermodynamic Properties of Liquid Fe-B and Fe-B-C Alloys," *AIST Transactions* — A. Semih Sunkar and K. Morita, Feb., p 164
- "Thermomechanical Modeling of Beam Blank Casting" — L.C. Hibbeler, K. Xu, B.G. Thomas, S. Koric and C. Spangler, July, p 60
- "Toward Integrated Ladle Metallurgy Control," *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

U

- "U.S. Energy — A Perspective on Resources and Consumption" — J. Stubbles, Oct., p 86
- "Ultimate Safety Device, The: A Load Scale on an EOT Crane" — R.L. Emery and G.D. Bruder, Apr., p 52
- "Understanding Industrial Electric Bills" — M. Costarell, May, p 253

List of Authors

A

- Abel, M., and Hein, M. — "The SIMETAL Ultimate at Colakoglu, Turkey," Feb., p 56
- Abramowitz, H.; Ye, J.; Xu, D.; Johnsen, E.; Hagen, T.; Zhao, W.; and Roller, M.A. — "Construction of a Web-Based Tutorial for 3-D Visualization of Ternary Phase Diagrams," Oct., p 75
- Apfel, J.; Rummler, T.; Knoth, V.; Belous, J.; and Doninger, T. — "High Productivity With Low Emissions — Challenge for Tomorrow," Feb., p 78
- Ammerling, W.-J., and Filippini, S.A. — "Further Developments in Wire Rod and Bar Production Using 3-Roll Technology," Sept., p 38
- Angerbauer, A.; Haring, B.; and Burger, R. — "Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills," May, p 267
- Arnold, E.; Kramer, R.A.; and Shoureshi, R. — "Enhancing the Operation of Highly Varying Industrial Loads to Increase Electric Reliability, Quality and Economics," May, p 239
- Astengo, G., and DeLoia, T. — "Solving the Insoluble: Electrolytic Tinning Lines With Insoluble Anodes," Aug., p 75
- Austin, P.R.; Maldonado, D.; Zulli, P.; and Guo, B. — "Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications," March, p 50

B

- Bader, J.; Schlüter, J.; Falkenreck, U.; and Kempken, J. — "Primary Energy Melting (PEM) — A Hybrid Process Using an Energy-Efficient Technology," Feb., p 47
- Bai, D.; Nelson, T.; Bodnar, R.; Cooke, M.; and Scumpu, S. — "Development of High-Performance Steels for Bridge Applications at SSAB North America," Oct., p 65
- Baker, R.M., and DeCarli, M.A. — "Medium Voltage Drive Application at U. S. Steel Lorain Tubular Operations, No. 3 Seamless Mill," Jan., p 47
- Barbhaya, R.; Rao, Y.S.S.; and Ranjan, M. — "Insight Into Steel Consumption in India," Apr., p 20
- Barna, B. — "Integration Technology at ArcelorMittal Dofasco Inc.," Jan., p 37
- Batista Vieira, J.; Santos Sampaio, R.; and Jones, J. — "Hot Metal Strategies for the EAF Industry," Feb., p 31
- Bel Fdhila, R.; Sand, U.; Yang, H.; and Eriksson, J.-E. — "Control of Gas Bubbles and Slag Layer in a Ladle Furnace by Electromagnetic Stirring," July, p 49
- Belous, J.; Rummler, T.; Apfel, J.; Knoth, V.; and Doninger, T. — "High Productivity With Low Emissions — Challenge for Tomorrow," Feb., p 78
- Blejde, W.N.; Edelman, D.G.; Campbell, P.C.; Killmore, C.R.; Carpenter, K.R.; Kaul, H.R.; and Williams, J.G. — "Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process," Oct., p 47
- Bodnar, R.; Bai, D.; Nelson, T.; Cooke, M.; and Scumpu, S. — "Development of High-Performance Steels for Bridge Applications at SSAB North America," Oct., p 65

- Bouganosopoulos, G.; Papantoniou, V.; and Sismanis, P. — "Start-Up Experience and Results of Consteel® at the SOVEL Meltshop," Feb., p 38
- Branion Jr., R.V.; Stone, R.P.; Patterson, D.; Neith, D.; and Koester, S. — "Further Process Improvements at Severstal Sparrows Point via New Technology Implementation — Moving the Bottlenecks," Nov., p 54
- Bresko, M. — "Production Preparation Process (3P): Lean Concepts for Project Planning," Dec., p 35
- Brockway, C. — "New Technology for Hot Mill Coil Conveyors," June, p 75
- Brousseau, R., and Vasiliw, T. — "Improving Caster Hydraulics Reliability and Reducing Costs With New Synthetic, Fire-Resistant Fluid," Dec., p 65
- Bruder, G.D., and Emery, R.L. — "The Ultimate Safety Device: A Load Scale on an EOT Crane," Apr., p 52
- Burger, R.; Angerbauer, A.; and Haring, B. — "Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills," May, p 267

C

- Campbell, P.C.; Edelman, D.G.; Killmore, C.R.; Carpenter, K.R.; Kaul, H.R.; Williams, J.G.; and Blejde, W.N. — "Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process," Oct., p 47
- Cantrell, J. — "Interview With Anthony R. Bridge, 2009 AIST President, An," June, p 34
- Cantrell, J. — "Interview With Gianpietro Benedetti, Chairman and Chief Executive Officer, Danieli, An," Feb., p 116
- Cantrell, J. — "John J. Ferriola: 2009 Steelmaker of the Year," Oct., p 42
- Carlsson, A.; Lantz, M.; Hassenzahl, D.; Lugnet, A.; and Moroz, G. — "25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio," Sept., p 29
- Carpenter, K.R.; Edelman, D.G.; Campbell, P.C.; Killmore, C.R.; Kaul, H.R.; Williams, J.G.; and Blejde, W.N. — "Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process," Oct., p 47
- Casco, S., and Lodolo, S. — "Latest Developments in SBQ Cold Processing and Finishing," Sept., p 59
- Chaubal, P.; Zheng, L.; Deshpande, R.; Zhou, C.Q.; and Huang, D. — "Prediction of Blast Furnace Hearth Inner Profiles," March, p 83
- Cheng, A.; Edwards, B.; Street, S.; Ebner, B.; and Hausemer, L. — "Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation," March, p 65
- Choi, M.E.; Sohn, H.Y.; Zhang, Y.; and Ramos, J.E. — "Suspension Reduction Technology for Ironmaking With Low CO₂ Emission and Energy Requirement," *AIST Transactions*, Aug., p 157
- Chukwulebe, B.; Liu, Q.; Pielet, H.; and Kaushik, P. — "An Investigation of Hot Metal Desulfurization by Mg," Nov., p 75

List of Authors

- Coetzee, C.; Els, C.J.L.; Vorster, O.; and Fisher, T.L. — “New Techniques in Steel Meltshop Air Pollution Control,” Feb., p 65
- Cooke, M.; Bai, D.; Nelson, T.; Bodnar, R.; and Scumpu, S. — “Development of High-Performance Steels for Bridge Applications at SSAB North America,” Oct., p 65
- Costarell, M. — “Understanding Industrial Electric Bills,” May, p 253
- Creech, T.R. — “Emerging Technology: AC Sourced Magnet Control,” June, p 63
- D**
- DeCarli, M.A., and Baker, R.M. — “Medium Voltage Drive Application at U. S. Steel Lorain Tubular Operations, No. 3 Seamless Mill,” Jan., p 47
- DeLoia, T., and Astengo, G. — “Solving the Insoluble: Electrolytic Tinning Lines With Insoluble Anodes,” Aug., p 75
- Deshpande, R.; Zheng, L.; Zhou, C.Q.; Huang, D.; and Chaubal, P. — “Prediction of Blast Furnace Hearth Inner Profiles,” March, p 83
- Dicker, J.; Sahajwalla, V.; Khanna, R.; Zaharia, M.; Kongkarat, S.; Rahman, M.; Kim, B.C.; Saha-Chaudhury, N.; O’Kane, P.; Skidmore, C.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Doninger, T.; Rummler, T.; Apfel, J.; Knoth, V.; and Belous, J. — “High Productivity With Low Emissions — Challenge for Tomorrow,” Feb., p 78
- Dussud, M.; Singh, C.; and Rabec, X. — “Mold Level System Upgrade at ArcelorMittal Dofasco’s No. 1 Caster,” July, p 75
- E**
- Ebner, B.; Edwards, B.; Cheng, A.; Street, S.; and Hausemer, L. — “Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation,” March, p 65
- Edwards, B.; Cheng, A.; Street, S.; Ebner, B.; and Hausemer, L. — “Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation,” March, p 65
- Edelman, D.G.; Campbell, P.C.; Killmore, C.R.; Carpenter, K.R.; Kaul, H.R.; Williams, J.G.; and Blejde, W.N. — “Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process,” Oct., p 47
- Els, C.J.L.; Vorster, O.; Coetzee, C.; and Fisher, T.L. — “New Techniques in Steel Meltshop Air Pollution Control,” Feb., p 65
- Emery, R.L., and Bruder, G.D. — “The Ultimate Safety Device: A Load Scale on an EOT Crane,” Apr., p 52
- Eriksson, J.-E.; Sand, U.; Yang, H.; and Bel Fdhila, R. — “Control of Gas Bubbles and Slag Layer in a Ladle Furnace by Electromagnetic Stirring,” July, p 49
- F**
- Falkenreck, U.; Schlüter, J.; Kempken, J.; and Bader, J. — “Primary Energy Melting (PEM) — A Hybrid Process Using an Energy-Efficient Technology,” Feb., p 47
- Fernandez, G., and Quintanilla, O. — “EAF Energy Optimization at Nucor-Yamato Steel,” Jan., p 78
- Fielder, R.; Wendt, P.; and Maschler, F. — “Quality Aspects of HPH® Annealed Steel Strip,” Jan., p 69
- Filippini, S.A., and Ammerling, W.-J. — “Further Developments in Wire Rod and Bar Production Using 3-Roll Technology,” Sept., p 38
- Fisher, T.L.; Els, C.J.L.; Vorster, O.; and Coetzee, C. — “New Techniques in Steel Meltshop Air Pollution Control,” Feb., p 65
- Fitzpatrick, T.L., and Pugh, W.H. — “Old Pickling Lines Get New Life With Plastic Tanks,” Dec., p 58
- Flannery, J.; Ma, N.; and Kokal, H.R. — “Role of Axial Cyclone in Recycling of Blast Furnace Offgas Cleaning System Solid Wastes,” March, p 76
- Flowers, K. — “Bearing Repair Provides Valuable Alternative to Bearing Replacement for Heavy Industries,” June, p 85
- Fukuda, K.; Kato, K.; Nomura, S.; and Uematsu, H. — “Chlorine Behavior of Coal and Waste Plastics During Carbonization,” March, p 90
- Fukuma, K.; Tessendorf, R.; Hosoda, H.; Kodama, S.; and Ishida, T. — “AC Drive Cable Selection,” Dec., p 49
- G**
- Geddis, R. — “Air Permitting in the Steel Industry — Dodging Potholes in a Deteriorating Road,” Apr., p 149
- Glaws, P.C.; Stone, R.P.; and Liu, C.C. — “Experience With an Innovative On-Line Inclusion Determination System for Liquid Steel,” July, p 42
- Gleason, J. — “Corrosion: Cause, Effect and Control,” Apr., p 34
- Graham, K.J., and Irons, G.A. — “Toward Integrated Ladle Metallurgy Control,” *AIST Transactions*, Jan., p 163
- Gregord, J. — “Nucor Steel Seattle: Improvements Resulting From the Modernization of the 4-Strand Billet Caster,” July, p 33
- Gris, B.C., and Nikitenko, E. — “Mechanism of Post-Rolling Deterioration in Hot Band Flatness During Coiling, A,” Oct., p 60
- Guo, B.; Maldonado, D.; Austin, P.R.; and Zulli, P. — “Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications,” March, p 50
- H**
- Hagen, T.; Abramowitz, H.; Ye, J.; Xu, D.; Johnsen, E.; Zhao, W.; and Roller, M.A. — “Construction of a Web-Based Tutorial for 3-D Visualization of Ternary Phase Diagrams,” Oct., p 75
- Hagenbuch, L., and Swank, J. — “Steel Scrap Haulage: A Look at How Advances in Rear-Eject Technology Have Enhanced and Streamlined the Steelmaking Process at Minimills,” June, p 54
- Hakomori, K.; Kurahshi, R.; Nagao, N.; Komaki, M.; and Kouzaki, M. — “Development of Amorphous-Alloy Film Coating Using the New Technique of Thermal Spraying,” *AIST Transactions*, June, p 139
- Haring, B.; Angerbauer, A.; and Burger, R. — “Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills,” May, p 267
- Harmsen, A.H.R.; Laging, W.; Zonneveld, M.; Jansen, E.; and Price, C.E. — “The Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel,” Aug., p 37
- Hashimura, M.; Mizuno, A.; and Miyanishi, K. — “Effect of MnS Distribution on Machinability in Low-C Lead-Free Free-Cutting Steel,” Sept., p 45
- Hassenzahl, D.; Lantz, M.; Lugnet, A.; Moroz, G.; and Carlsson, A. — “25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio,” Sept., p 29
- Hausemer, L.; Edwards, B.; Cheng, A.; Street, S.; and Ebner, B. — “Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation,” March, p 65
- Hein, M., and Abel, M. — “The SIMETAL Ultimate at Colakoglu, Turkey,” Feb., p 56
- Hibbeler, L.C.; Xu, K.; Thomas, B.G.; Koric, S.; and Spangler, C. — “Thermomechanical Modeling of Beam Blank Casting,” July, p 60
- Hill, W.J. — “Delayed Cracking and Safety Considerations for Forged Steel Work Rolls,” Apr., p 57
- Hoppel, C., and Milman, R. — “Fixed vs. Floating Rail Arrangements,” June, p 68
- Horii, K.; Lee, J.-S.; Kang, Y.H.; Won, C.-S.; and Son, S.-L. — “Development of a New Solid-State Joining Process for Endless Hot Rolling,” Aug., p 48
- Hosoda, H.; Tessendorf, R.; Fukuma, K.; Kodama, S.; and Ishida, T. — “AC Drive Cable Selection,” Dec., p 49
- Howell, R.A., and Van Aken, D.C. — “A Literature Review of Age Hardening Fe-Mn-Al-C Alloys,” *AIST Transactions*, Apr., p 192

- Howell, R.A.; Montgomery, J.S.; and Van Aken, D.C. — “Advancements in Steel for Weight Reduction of P900 Armor Plates,” *AIST Transactions*, July, p 167
- Huang, D.; Zheng, L.; Deshpande, R.; Zhou, C.Q.; and Chaulal, P. — “Prediction of Blast Furnace Hearth Inner Profiles,” March, p 83
- I**
- Iorizzo, C.; Speranza, L.; and Lenardon, A. — “Plant Vehicles Tracking With GPS-DGPS-GPRS Technologies,” Jan., p 58
- Irons, G.A., and Graham, K.J. — “Toward Integrated Ladle Metallurgy Control,” *AIST Transactions*, Jan., p 163
- Ishida, T.; Tessendorf, R.; Hosoda, H.; Fukuma, K.; and Kodama, S. — “AC Drive Cable Selection,” Dec., p 49
- J**
- Jamek, K. — “Innovative Offgas Cleaning and Recovery Solutions for Steelmaking,” Nov., p 61
- Jansen, E.; Harmsen, A.H.R.; Laging, W.; Zonneveld, M.; and Price, C.E. — “The Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel,” Aug., p 37
- Johnsen, E.; Abramowitz, H.; Ye, J.; Xu, D.; Hagen, T.; Zhao, W.; and Roller, M.A. — “Construction of a Web-Based Tutorial for 3-D Visualization of Ternary Phase Diagrams,” Oct., p 75
- Jones, J.; Santos Sampaio, R.; and Batista Vieira, J. — “Hot Metal Strategies for the EAF Industry,” Feb., p 31
- K**
- Kang, Y.H.; Lee, J.-S.; Won, C.-S.; Son, S.-L.; and Horii, K. — “Development of a New Solid-State Joining Process for Endless Hot Rolling,” Aug., p 48
- Kastonek, A.L. — “Contamination Control Pays Big Dividends,” Dec., p 44
- Kato, K.; Nomura, S.; Fukuda, K.; and Uematsu, H. — “Chlorine Behavior of Coal and Waste Plastics During Carbonization,” March, p 90
- Kaul, H.R.; Edelman, D.G.; Campbell, P.C.; Killmore, C.R.; Carpenter, K.R.; Williams, J.G.; and Blejde, W.N. — “Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process,” Oct., p 47
- Kaushik, P.; Liu, Q.; Pielet, H.; and Chukwulebe, B. — “An Investigation of Hot Metal Desulfurization by Mg,” Nov., p 75
- Kaushik, P.; Pielet, H.; and Yin, H. — “Inclusion Characterization: A Tool for Measurement of Steel Cleanliness and Process Control,” Nov., p 82
- Kempken, J.; Schlüter, J.; Falkenreck, U.; and Bader, J. — “Primary Energy Melting (PEM) — A Hybrid Process Using an Energy-Efficient Technology,” Feb., p 47
- Khanna, R.; Sahajwalla, V.; Zaharia, M.; Kongkarat, S.; Rahman, M.; Kim, B.C.; Saha-Chaudhury, N.; O’Kane, P.; Dicker, J.; Skidmore, C.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Killmore, C.R.; Edelman, D.G.; Campbell, P.C.; Carpenter, K.R.; Kaul, H.R.; Williams, J.G.; and Blejde, W.N. — “Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process,” Oct., p 47
- Kim, B.C.; Sahajwalla, V.; Khanna, R.; Zaharia, M.; Kongkarat, S.; Rahman, M.; Saha-Chaudhury, N.; O’Kane, P.; Dicker, J.; Skidmore, C.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Knights, D.; Sahajwalla, V.; Khanna, R.; Zaharia, M.; Kongkarat, S.; Rahman, M.; Kim, B.C.; Saha-Chaudhury, N.; O’Kane, P.; Dicker, J.; and Skidmore, C. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Knoth, V.; Rummeler, T.; Apfel, J.; Belous, J.; and Doninger, T. — “High Productivity With Low Emissions — Challenge for Tomorrow,” Feb., p 78
- Kodama, S.; Tessendorf, R.; Hosoda, H.; Fukuma, K.; and Ishida, T. — “AC Drive Cable Selection,” Dec., p 49
- Koester, S.; Stone, R.P.; Patterson, D.; Neith, D.; and Branion Jr., R.V. — “Further Process Improvements at Severstal Sparrows Point via New Technology Implementation — Moving the Bottlenecks,” Nov., p 54
- Kokal, H.R.; Ma, N.; and Flannery, J. — “Role of Axial Cyclone in Recycling of Blast Furnace Offgas Cleaning System Solid Wastes,” March, p 76
- Komaki, M.; Kurahshi, R.; Nagao, N.; Hakomori, K.; and Kouzaki, M. — “Development of Amorphous-Alloy Film Coating Using the New Technique of Thermal Spraying,” *AIST Transactions*, June, p 139
- Kongkarat, S.; Sahajwalla, V.; Khanna, R.; Zaharia, M.; Rahman, M.; Kim, B.C.; Saha-Chaudhury, N.; O’Kane, P.; Dicker, J.; Skidmore, C.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Koric, S.; Hibbeler, L.C.; Xu, K.; Thomas, B.G.; and Spangler, C. — “Thermomechanical Modeling of Beam Blank Casting,” July, p 60
- Kosnik, D.J. — “Choosing the Correct Front-End Technology for a Low-Voltage AC Drive System,” Jan., p 87
- Kouzaki, M.; Kurahshi, R.; Nagao, N.; Komaki, M.; and Hakomori, K. — “Development of Amorphous-Alloy Film Coating Using the New Technique of Thermal Spraying,” *AIST Transactions*, June, p 139
- Kramer, R.A.; Shoureshi, R.; and Arnold, E. — “Enhancing the Operation of Highly Varying Industrial Loads to Increase Electric Reliability, Quality and Economics,” May, p 239
- Kurahshi, R.; Nagao, N.; Komaki, M.; Hakomori, K.; and Kouzaki, M. — “Development of Amorphous-Alloy Film Coating Using the New Technique of Thermal Spraying,” *AIST Transactions*, June, p 139
- L**
- Laging, W.; Harmsen, A.H.R.; Zonneveld, M.; Jansen, E.; and Price, C.E. — “The Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel,” Aug., p 37
- Lantz, M.; Hassenzahl, D.; Lugnet, A.; Moroz, G.; and Carlsson, A. — “25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio,” Sept., p 29
- Lecomte, V.; Walmag, G.; Vanden Eynde, X.; and Sinnaeve, M. — “Mechanisms of Work Roll Degradation in Hot Strip Mills,” Aug., p 66
- Lecco, T.J. — “HISMELT® Technology: The Future of Ironmaking,” March, p 33
- Lecco, T.J. — “Nucor Memphis SBQ Steel Mill,” Nov., p 31
- Lee, J.-S.; Kang, Y.H.; Won, C.-S.; Son, S.-L.; and Horii, K. — “Development of a New Solid-State Joining Process for Endless Hot Rolling,” Aug., p 48
- Lee, Y.M. — “Low-Temperature Oxidation on Magnesia Carbon Brick,” Nov., p 70
- Leek, A.I.F. — “Recent Developments in Strand Condition Monitoring Devices,” July, p 84
- Lenardon, A.; Iorizzo, C.; and Speranza, L. — “Plant Vehicles Tracking With GPS-DGPS-GPRS Technologies,” Jan., p 58
- Levick, M., and Liu, Y. — “Investigation Into the Effects of Leveling Roll Diameter Variation on Coupling Shear Pin Breakage of a Hot Plate Leveler,” Aug., p 82
- Li, Y.; Misra, S.; and Sohn, I. — “Hydrogen and Nitrogen Control in Steelmaking at U. S. Steel,” Nov., p 43
- Liu, C.C.; Stone, R.P.; and Glaws, P.C. — “Experience With an Innovative On-Line Inclusion Determination System for Liquid Steel,” July, p 42
- Liu, Q.; Pielet, H.; Kaushik, P.; and Chukwulebe, B. — “An Investigation of Hot Metal Desulfurization by Mg,” Nov., p 75
- Liu, Y., and Levick, M. — “Investigation Into the Effects of Leveling Roll Diameter Variation on Coupling Shear Pin Breakage of a Hot Plate Leveler,” Aug., p 82

- Liu, Y.-C.; Sun, H.; and Lu, M.-J. — “Magnesium Vapor Loss in Offgas of Hot Metal Desulfurization Process by Magnesium Injection,” *AIST Transactions*, Oct., p 173
- Lodolo, S., and Casco, S. — “Latest Developments in SBQ Cold Processing and Finishing,” Sept., p 59
- Lu, M.-J.; Sun, H.; and Liu, Y.-C. — “Magnesium Vapor Loss in Offgas of Hot Metal Desulfurization Process by Magnesium Injection,” *AIST Transactions*, Oct., p 173
- Lugnet, A.; Lantz, M.; Hassenzahl, D.; Moroz, G.; and Carlsson, A. — “25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio,” Sept., p 29
- M**
- Ma, N.; Kokal, H.R.; and Flannery, J. — “Role of Axial Cyclone in Recycling of Blast Furnace Offgas Cleaning System Solid Wastes,” March, p 76
- Maldonado, D.; Austin, P.R.; Zulli, P.; and Guo, B. — “Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications,” March, p 50
- Mantyla, P.T.; Tiitto, K.M.; and Pyykkonen, J.M. — “Improving the Quality of Steel Slabs and Billets With Additional Electric Heating Elements,” Sept., p 52
- Maschler, F.; Fielder, R.; and Wendt, P. — “Quality Aspects of HPH® Annealed Steel Strip,” Jan., p 69
- Milman, R., and Hoppel, C. — “Fixed vs. Floating Rail Arrangements,” June, p 68
- Miyanishi, K.; Hashimura, M.; and Mizuno, A. — “Effect of MnS Distribution on Machinability in Low-C Lead-Free Free-Cutting Steel,” Sept., p 45
- Misra, S.; Li, Y.; and Sohn, I. — “Hydrogen and Nitrogen Control in Steelmaking at U. S. Steel,” Nov., p 43
- Mizuno, A.; Hashimura, M.; and Miyanishi, K. — “Effect of MnS Distribution on Machinability in Low-C Lead-Free Free-Cutting Steel,” Sept., p 45
- Montgomery, J.S.; Howell, R.A.; and Van Aken, D.C. — “Advancements in Steel for Weight Reduction of P900 Armor Plates,” *AIST Transactions*, July, p 167
- Morita, K., and Semih Sunkar, A. — “Thermodynamic Properties of Liquid Fe-B and Fe-B-C Alloys,” *AIST Transactions*, Feb., p 164
- Moroz, G.; Lantz, M.; Hassenzahl, D.; Lugnet, A.; and Carlsson, A. — “25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio,” Sept., p 29
- N**
- Nagao, N.; Kurahshi, R.; Komaki, M.; Hakomori, K.; and Kouzaki, M. — “Development of Amorphous-Alloy Film Coating Using the New Technique of Thermal Spraying,” *AIST Transactions*, June, p 139
- Neith, D.; Stone, R.P.; Patterson, D.; Koester, S.; and Branion Jr., R.V. — “Further Process Improvements at Severstal Sparrows Point via New Technology Implementation — Moving the Bottlenecks,” Nov., p 54
- Nelson, T.; Bai, D.; Bodnar, R.; Cooke, M.; and Scumpu, S. — “Development of High-Performance Steels for Bridge Applications at SSAB North America,” Oct., p 65
- Nikitenko, E., and Gris, B.C. — “Mechanism of Post-Rolling Deterioration in Hot Band Flatness During Coiling,” Oct., p 60
- Nomura, S.; Kato, K.; Fukuda, K.; and Uematsu, H. — “Chlorine Behavior of Coal and Waste Plastics During Carbonization,” March, p 90
- O**
- O’Kane, P.; Sahajwalla, V.; Khanna, R.; Zaharia, M.; Kongkarat, S.; Rahman, M.; Kim, B.C.; Saha-Chaudhury, N.; Dicker, J.; Skidmore, C.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Obrecht, T.; Thomas, A.; and Turcotte, S. — “Development of an Energy Conservation Program at Severstal North America Inc.,” May, p 248
- P**
- Papantoniou, V.; Bouganosopoulos, G.; and Sismanis, P. — “Start-Up Experience and Results of Consteel® at the SOVEL Meltshop,” Feb., p 38
- Patterson, D.; Stone, R.P.; Neith, D.; Koester, S.; and Branion Jr., R.V. — “Further Process Improvements at Severstal Sparrows Point via New Technology Implementation — Moving the Bottlenecks,” Nov., p 54
- Pawelski, H., and Richter, H.-P. — “Application of Low-Volume Lubrication and Liquid Nitrogen in the Final Stand of a Tandem Cold Mill,” Aug., p 57
- Pielet, H.; Liu, Q.; Kaushik, P.; and Chukwulebe, B. — “An Investigation of Hot Metal Desulfurization by Mg,” Nov., p 75
- Pielet, H.; Kaushik, P.; and Yin, H. — “Inclusion Characterization: A Tool for Measurement of Steel Cleanliness and Process Control,” Nov., p 82
- Price, C.E.; Harmsen, A.H.R.; Laging, W.; Zonneveld, M.; and Jansen, E. — “The Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel,” Aug., p 37
- Pugh, W.H., and Fitzpatrick, T.L. — “Old Pickling Lines Get New Life With Plastic Tanks,” Dec., p 58
- Pyykkonen, J.M.; Tiitto, K.M.; and Mantyla, P.T. — “Improving the Quality of Steel Slabs and Billets With Additional Electric Heating Elements,” Sept., p 52
- Q**
- Quintanilla, O., and Fernandez, G. — “EAF Energy Optimization at Nucor-Yamato Steel,” Jan., p 78
- R**
- Rabec, X.; Singh, C.; and Dussud, M. — “Mold Level System Upgrade at ArcelorMittal Dofasco’s No. 1 Caster,” July, p 75
- Rahman, M.; Sahajwalla, V.; Khanna, R.; Zaharia, M.; Kongkarat, S.; Kim, B.C.; Saha-Chaudhury, N.; O’Kane, P.; Dicker, J.; Skidmore, C.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Ramos, J.E.; Sohn, H.Y.; Choi, M.E.; and Zhang, Y. — “Suspension Reduction Technology for Ironmaking With Low CO₂ Emission and Energy Requirement,” *AIST Transactions*, Aug., p 157
- Ranjan, M.; Rao, Y.S.S.; and Barbhaya, R. — “Insight Into Steel Consumption in India,” Apr., p 20
- Rao, Y.S.S.; Ranjan, M.; and Barbhaya, R. — “Insight Into Steel Consumption in India,” Apr., p 20
- Richter, H.-P., and Pawelski, H. — “Application of Low-Volume Lubrication and Liquid Nitrogen in the Final Stand of a Tandem Cold Mill,” Aug., p 57
- Roller, M.A.; Abramowitz, H.; Ye, J.; Xu, D.; Johnsen, E.; Hagen, T.; and Zhao, W. — “Construction of a Web-Based Tutorial for 3-D Visualization of Ternary Phase Diagrams,” Oct., p 75
- Rummmler, T.; Apfel, J.; Knoth, V.; Belous, J.; and Doninger, T. — “High Productivity With Low Emissions — Challenge for Tomorrow,” Feb., p 78
- S**
- Saha-Chaudhury, N.; Sahajwalla, V.; Khanna, R.; Zaharia, M.; Kongkarat, S.; Rahman, M.; Kim, B.C.; O’Kane, P.; Dicker, J.; Skidmore, C.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Sahajwalla, V.; Khanna, R.; Zaharia, M.; Kongkarat, S.; Rahman, M.; Kim, B.C.; Saha-Chaudhury, N.; O’Kane, P.; Dicker, J.; Skidmore, C.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43

List of Authors

- Sand, U.; Yang, H.; Eriksson, J.-E.; and Bel Fdhila, R. — “Control of Gas Bubbles and Slag Layer in a Ladle Furnace by Electromagnetic Stirring,” July, p 49
- Santos Sampaio, R.; Jones, J.; and Batista Vieira, J. — “Hot Metal Strategies for the EAF Industry,” Feb., p 31
- Schlüter, J.; Falkenreck, U.; Kempken, J.; and Bader, J. — “Primary Energy Melting (PEM) — A Hybrid Process Using an Energy-Efficient Technology,” Feb., p 47
- Scumpu, S.; Bai, D.; Nelson, T.; Bodnar, R.; and Cooke, M. — “Development of High-Performance Steels for Bridge Applications at SSAB North America,” Oct., p 65
- Semih Sunkar, A., and Morita, K. — “Thermodynamic Properties of Liquid Fe-B and Fe-B-C Alloys,” *AIST Transactions*, Feb., p 164
- Shoureshi, R.; Kramer, R.A.; and Arnold, E. — “Enhancing the Operation of Highly Varying Industrial Loads to Increase Electric Reliability, Quality and Economics,” May, p 239
- Singh, C.; Rabec, X.; and Dussud, M. — “Mold Level System Upgrade at ArcelorMittal Dofasco’s No. 1 Caster,” July, p 75
- Sinnaeve, M.; Walmag, G.; Vanden Eynde, X.; and Lecomte, V. — “Mechanisms of Work Roll Degradation in Hot Strip Mills,” Aug., p 66
- Sipich, W., and Toocheck, D. — “Energy Savings Through Improved Skid Insulation Materials and Techniques on Steel Reheat Furnace Skid Systems,” May, p 260
- Sismanis, P.; Bouganosopoulos, G.; and Papatoniou, V. — “Start-Up Experience and Results of Consteel® at the SOVEL Meltshop,” Feb., p 38
- Skidmore, C.; Sahajwalla, V.; Khanna, R.; Zaharia, M.; Kongkarat, S.; Rahman, M.; Kim, B.C.; Saha-Chaudhury, N.; O’Kane, P.; Dicker, J.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Sohn, H.Y.; Choi, M.E.; Zhang, Y.; and Ramos, J.E. — “Suspension Reduction Technology for Ironmaking With Low CO₂ Emission and Energy Requirement,” *AIST Transactions*, Aug., p 157
- Sohn, I.; Misra, S.; and Li, Y. — “Hydrogen and Nitrogen Control in Steelmaking at U. S. Steel,” Nov., p 43
- Son, S.-L.; Lee, J.-S.; Kang, Y.-H.; Won, C.-S.; and Horii, K. — “Development of a New Solid-State Joining Process for Endless Hot Rolling,” Aug., p 48
- Spangler, C.; Hibbeler, L.C.; Xu, K.; Thomas, B.G.; and Koric, S. — “Thermomechanical Modeling of Beam Blank Casting,” July, p 60
- Speranza, L.; Iorizzo, C.; and Lenardon, A. — “Plant Vehicles Tracking With GPS-DGPS-GPRS Technologies,” Jan., p 58
- Stone, R.P.; Liu, C.C.; and Glaws, P.C. — “Experience With an Innovative On-Line Inclusion Determination System for Liquid Steel,” July, p 42
- Stone, R.P.; Patterson, D.; Neith, D.; Koester, S.; and Branion Jr., R.V. — “Further Process Improvements at Severstal Sparrows Point via New Technology Implementation — Moving the Bottlenecks,” Nov., p 54
- Street, S.; Edwards, B.; Cheng, A.; Ebner, B.; and Hausemer, L. — “Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation,” March, p 65
- Stubbles, J. — “U.S. Energy — A Perspective on Resources and Consumption,” Oct., p 86
- Sun, H.; Liu, Y.-C.; and Lu, M.-J. — “Magnesium Vapor Loss in Offgas of Hot Metal Desulfurization Process by Magnesium Injection,” *AIST Transactions*, Oct., p 173
- Swank, J., and Hagenbuch, L. — “Steel Scrap Haulage: A Look at How Advances in Rear-Eject Technology Have Enhanced and Streamlined the Steelmaking Process at Minimills,” June, p 54
- T**
- Tessendorf, R.; Hosoda, H.; Fukuma, K.; Kodama, S.; and Ishida, T. — “AC Drive Cable Selection,” Dec., p 49
- Thexton, A. — “Safety and Efficiency Improvements Using Digital DC Controls,” June, p 45
- Thomas, A.; Obrecht, T.; and Turcotte, S. — “Development of an Energy Conservation Program at Severstal North America Inc.,” May, p 248
- Thomas, B.G.; Hibbeler, L.C.; Xu, K.; Koric, S.; and Spangler, C. — “Thermomechanical Modeling of Beam Blank Casting,” July, p 60
- Tiitto, K.M.; Pyykkonen, J.M.; and Mantyla, P.T. — “Improving the Quality of Steel Slabs and Billets With Additional Heating Elements,” Sept., p 52
- Toocheck, D., and Sipich, W. — “Energy Savings Through Improved Skid Insulation Materials and Techniques on Steel Reheat Furnace Skid Systems,” May, p 260
- Turcotte, S.; Obrecht, T.; and Thomas, A. — “Development of an Energy Conservation Program at Severstal North America Inc.,” May, p 248
- U**
- Uematsu, H.; Kato, K.; Nomura, S.; and Fukuda, K. — “Chlorine Behavior of Coal and Waste Plastics During Carbonization,” March, p 90
- V**
- Van Aken, D.C.; Howell, R.A.; and Montgomery, J.S. — “Advancements in Steel for Weight Reduction of P900 Armor Plates,” *AIST Transactions*, July, p 167
- Van Aken, D.C., and Howell, R.A. — “A Literature Review of Age Hardening Fe-Mn-Al-C Alloys,” *AIST Transactions*, Apr., p 192
- Vanden Eynde, X.; Walmag, G.; Sinnaeve, M.; and Lecomte, V. — “Mechanisms of Work Roll Degradation in Hot Strip Mills,” Aug., p 66
- Varmecky, S. — “Why It Pays to Be a Leader: AIST 2008 Membership Survey Results,” March, p 252
- Vasiliw, T., and Brousseau, R. — “Improving Caster Hydraulics Reliability and Reducing Costs With New Synthetic, Fire-Resistant Fluid,” Dec., p 65
- Vorster, O.; Els, C.J.L.; Coetzee, C.; and Fisher, T.L. — “New Techniques in Steel Meltshop Air Pollution Control,” Feb., p 65
- W**
- Walmag, G.; Vanden Eynde, X.; Sinnaeve, M.; and Lecomte, V. — “Mechanisms of Work Roll Degradation in Hot Strip Mills,” Aug., p 66
- Wendt, P.; Fielder, R.; and Maschler, F. — “Quality Aspects of HPH® Annealed Steel Strip,” Jan., p 69
- Williams, J.G.; Edelman, D.G.; Campbell, P.C.; Killmore, C.R.; Carpenter, K.R.; Kaul, H.R.; and Blejde, W.N. — “Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process,” Oct., p 47
- Won, C.-S.; Lee, J.-S.; Kang, Y.-H.; Son, S.-L.; and Horii, K. — “Development of a New Solid-State Joining Process for Endless Hot Rolling,” Aug., p 48
- X**
- Xu, D.; Abramowitz, H.; Ye, J.; Johnsen, E.; Hagen, T.; Zhao, W.; and Roller, M.A. — “Construction of a Web-Based Tutorial for 3-D Visualization of Ternary Phase Diagrams,” Oct., p 75
- Xu, K.; Hibbeler, L.C.; Thomas, B.G.; Koric, S.; and Spangler, C. — “Thermomechanical Modeling of Beam Blank Casting,” July, p 60
- Y**
- Yang, H.; Sand, U.; Eriksson, J.-E.; and Bel Fdhila, R. — “Control of Gas Bubbles and Slag Layer in a Ladle Furnace by Electromagnetic Stirring,” July, p 49
- Ye, J.; Abramowitz, H.; Xu, D.; Johnsen, E.; Hagen, T.; Zhao, W.; and Roller, M.A. — “Construction of a Web-Based Tutorial for 3-D Visualization of Ternary Phase Diagrams,” Oct., p 75
- Yin, H.; Kaushik, P.; and Piolet, H. — “Inclusion Characterization: A Tool for Measurement of Steel Cleanliness and Process Control,” Nov., p 82
- Z**
- Zaharia, M.; Sahajwalla, V.; Khanna, R.; Kongkarat, S.; Rahman, M.; Kim, B.C.; Saha-Chaudhury, N.; O’Kane, P.; Dicker,

- J.; Skidmore, C.; and Knights, D. — “Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies,” Apr., p 43
- Zhang, Y.; Sohn, H.Y.; Choi, M.E.; and Ramos, J.E. — “Suspension Reduction Technology for Ironmaking With Low CO₂ Emission and Energy Requirement,” *AIST Transactions*, Aug., p 157
- Zhao, W.; Abramowitz, H.; Ye, J.; Xu, D.; Johnsen, E.; Hagen, T.; and Roller, M.A. — “Construction of a Web-Based Tutorial for 3-D Visualization of Ternary Phase Diagrams,” Oct., p 75
- Zheng, L.; Deshpande, R.; Zhou, C.Q.; Huang, D.; and Chaubal, P. — “Prediction of Blast Furnace Hearth Inner Profiles,” March, p 83
- Zhou, C.Q.; Zheng, L.; Deshpande, R.; Huang, D.; and Chaubal, P. — “Prediction of Blast Furnace Hearth Inner Profiles,” March, p 83
- Zonneveld, M.; Harmsen, A.H.R.; Laging, W.; Jansen, E.; and Price, C.E. — “The Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel,” Aug., p 37
- Zulli, P.; Maldonado, D.; Austin, P.R.; and Guo, B. — “Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications,” March, p 50

List of Companies

A

ABB AB Corporate Research

“Control of Gas Bubbles and Slag Layer in a Ladle Furnace by Electromagnetic Stirring” — U. Sand, H. Yang, J-E. Eriksson and R. Bel Fdhila, July, p 49

ABB AB Metallurgy

“Control of Gas Bubbles and Slag Layer in a Ladle Furnace by Electromagnetic Stirring” — U. Sand, H. Yang, J-E. Eriksson and R. Bel Fdhila, July, p 49

Air Liquide

“Hismelt® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

Air Pollution Regulatory Services

“Air Permitting in the Steel Industry — Dodging Potholes in a Deteriorating Road” — R. Geddis, Apr., p 149

Air Products and Chemicals Inc.

“Application of Low-Volume Lubrication and Liquid Nitrogen in the Final Stand of a Tandem Cold Mill” — H. Pawelski and H-P. Richter, Aug., p 57

Aker Solutions

“Hismelt® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

Alcoa

“Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

Allis-Chalmers Energy Inc.

“Contamination Control Pays Big Dividends” — A.L. Kastonek, Dec., p 44

Amdel Laboratory and Technical Services

“Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies” — V. Sahajwalla, R. Khanna, M. Zaharia, S. Kongkarat, M. Rahman, B.C. Kim, N. Saha-Chaudhury, P. O’Kane, J. Dicker, C. Skidmore and D. Knights, Apr., p 43

American Iron and Steel Institute

“Development of High-Performance Steels for Bridge Applications at SSAB North America” — D. Bai, T. Nelson, R. Bodnar, M. Cooke and S. Scumpu, Oct., p 65

American Society for Testing Materials (ASTM)

“Delayed Cracking and Safety Considerations for Forged Steel Work Rolls” — W.J. Hill, Apr., p 57

AMIGE International

“EAF Energy Optimization at Nucor-Yamato Steel” — O. Quintanilla and G. Fernandez, Jan., p 78

ArcelorMittal

“Enhancing the Operation of Highly Varying Industrial Loads to Increase Electric Reliability, Quality and Economics” — R.A. Kramer, R. Shoureshi and E. Arnold, May, p 239

“Hot Metal Strategies for the EAF Industry” — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

ArcelorMittal Burns Harbor

“Energy Savings Through Improved Skid Insulation Materials and Techniques on Steel Reheat Furnace Skid Systems” — D. Toocheck and W. Sipich, May, p 260

“Ultimate Safety Device, The: A Load Scale on an EOT Crane” — R.L. Emery and G.D. Bruder, Apr., p 52

ArcelorMittal Dofasco Inc.

“Delayed Cracking and Safety Considerations for Forged Steel Work Rolls” — W.J. Hill, Apr., p 57

“Integration Technology at ArcelorMittal Dofasco Inc.” — B. Barna, Jan., p 37

“Mold Level System Upgrade at ArcelorMittal Dofasco’s No. 1 Caster” — C. Singh, X. Rabec and M. Dussud, July, p 75

“Toward Integrated Ladle Metallurgy Control,” *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

ArcelorMittal Flat Americas

“Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The” — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

ArcelorMittal Fos-sur-Mer

“Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills” — A. Angerbauer, B. Haring and R. Burger, May, p 267

ArcelorMittal Global R&D — East Chicago

“Inclusion Characterization: A Tool for Measurement of Steel Cleanliness and Process Control” — P. Kaushik, H. Pielet and H. Yin, Nov., p 82

“Investigation of Hot Metal Desulfurization by Mg, An” — Q. Liu, H. Pielet, P. Kaushik and B. Chukwulebe, Nov., p 75

“Low-Temperature Oxidation on Magnesia Carbon Brick” — Y.M. Lee, Nov., p 70

“Prediction of Blast Furnace Hearth Inner Profiles” — L. Zheng, R. Deshpande, C.Q. Zhou, D. Huang and P. Chaubal, March, p 83

“Role of Axial Cyclone in Recycling of Blast Furnace Offgas Cleaning System Solid Wastes” — N. Ma, H.R. Kokal and J. Flannery, March, p 76

ArcelorMittal Indiana Harbor

“Role of Axial Cyclone in Recycling of Blast Furnace Offgas Cleaning System Solid Wastes” — N. Ma, H.R. Kokal and J. Flannery, March, p 76

ArcelorMittal Inland

“Recent Developments in Strand Condition Monitoring Devices” — A.I.F. Leek, July, p 84

ArcelorMittal Juiz de For a Acos Longos

“Hot Metal Strategies for the EAF Industry” — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

List of Companies

ArcelorMittal Shelby – Tubular Products

“25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio” — M. Lantz, D. Hassenzahl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

ArcelorMittal Steel

“Prediction of Blast Furnace Hearth Inner Profiles” — L. Zheng, R. Deshpande, C.Q. Zhou, D. Huang and P. Chaubal, March, p 83

Argonne National Laboratory

“U.S. Energy — A Perspective on Resources and Consumption” — J. Stubbles, Oct., p 86

Army Research Lab

“Advancements in Steel for Weight Reduction of P900 Armor Plates,” *AIST Transactions* — R.A. Howell, J.S. Montgomery and D.C. Van Aken, July, p 167

Ascometal

“25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio” — M. Lantz, D. Hassenzahl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

AVEMIS

“Mold Level System Upgrade at ArcelorMittal Dofasco’s No. 1 Caster” — C. Singh, X. Rabec and M. Dussud, July, p 75

Avtron Industrial Automation Inc.

“Choosing the Correct Front-End Technology for a Low-Voltage AC Drive System” — D.J. Kosnik, Jan., p 87

B

Badische Stahl-Engineering GmbH

“High Productivity With Low Emissions — Challenge for Tomorrow” — T. Rummler, J. Apfel, V. Knoth, J. Belous and T. Doninger, Feb., p 78

Badische Stahlwerke GmbH

“High Productivity With Low Emissions — Challenge for Tomorrow” — T. Rummler, J. Apfel, V. Knoth, J. Belous and T. Doninger, Feb., p 78

Bender Corp.

“High Productivity With Low Emissions — Challenge for Tomorrow” — T. Rummler, J. Apfel, V. Knoth, J. Belous and T. Doninger, Feb., p 78

Berry Metal Co.

“Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The” — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

“HiSmelt® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

Berthold Technologies GmbH & Co. KG

“Nucor Memphis SBQ Steel Mill” — T.J. Leczo, Nov., p 31

BHP-Billiton

“Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications” — D. Maldonado, P.R. Austin, P. Zulli and B. Guo, March, p 50

Bloom Engineering Co. Inc.

“Energy Savings Through Improved Skid Insulation Materials and Techniques on Steel Reheat Furnace Skid Systems” — D. Toocheck and W. Sipich, May, p 260

BlueScope Steel

“Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications” — D. Maldonado, P.R. Austin, P. Zulli and B. Guo, March, p 50

“Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process” — D.G. Edelman, P.C. Campbell, C.R. Killmore, K.R. Carpenter, H.R. Kaul, J.G. Williams and W.N. Blejde, Oct., p 47

BlueScope Steel Research Laboratories

“Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications” — D. Maldonado, P.R. Austin, P. Zulli and B. Guo, March, p 50

Boeing

“Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

Branion Associates Inc.

“Further Process Improvements at Severstal Sparrows Point via New Technology Implementation — Moving the Bottlenecks” — R.P. Stone, D. Patterson, D. Neith, S. Koester and R.V. Branion Jr., Nov., p 54

Bruker AXS Inc.

“Nucor Memphis SBQ Steel Mill” — T.J. Leczo, Nov., p 31

C

C.D. Wälzholz group

“Application of Low-Volume Lubrication and Liquid Nitrogen in the Final Stand of a Tandem Cold Mill” — H. Pawelski and H-P. Richter, Aug., p 57

Cableform Inc.

“Safety and Efficiency Improvements Using Digital DC Controls” — A. Thexton, June, p 45

Carolina Consulting Group

“Development of an Energy Conservation Program at Severstal North America Inc.” — T. Obrecht, A. Thomas and S. Turcotte, May, p 248

Castrip LLC

“Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process” — D.G. Edelman, P.C. Campbell, C.R. Killmore, K.R. Carpenter, H.R. Kaul, J.G. Williams and W.N. Blejde, Oct., p 47

Castrol Industrial Americas Inc.

“Improving Caster Hydraulics Reliability and Reducing Costs With New Synthetic, Fire-Resistant Fluid” — R. Brousseau and T. Vasiliw, Dec., p 65

CCR Electric LLC

“Ultimate Safety Device: A Load Scale on an EOT Crane, The” — R.L. Emery and G.D. Bruder, Apr., p 52

Centro Sviluppo Materiali (CSM)

“Solving the Insoluble: Electrolytic Tinning Lines With Insoluble Anodes” — G. Astengo and T. DeLoia, Aug., p 75

China Steel Corp.

“Magnesium Vapor Loss in Offgas of Hot Metal Desulfurization Process by Magnesium Injection,” *AIST Transactions* — H. Sun, Y-C. Liu and M-J. Lu, Oct., p 173

Clyde Materials Handling Ltd.

“HiSmelt® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

Cockerill Sambre

“Hot Metal Strategies for the EAF Industry” — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

Colakoglu Metalurji A.S.

“SIMETAL Ultimate at Colakoglu, Turkey, The” — M. Abel and M. Hein, Feb., p 56

Concast AG

“Nucor Steel Seattle: Improvements Resulting From the Modernization of the 4-Strand Billet Caster” — J. Gregord, July, p 33

Concast America Inc.

“Nucor Steel Seattle: Improvements Resulting From the Modernization of the 4-Strand Billet Caster” — J. Gregord, July, p 33

Consulto Enviro CC

“New Techniques in Steel Meltshop Air Pollution Control” — C.J.L. Els, O. Vorster, C. Coetzee and T.L. Fisher, Feb., p 65

Corus

“Inclusion Characterization: A Tool for Measurement of Steel Cleanliness and Process Control” — P. Kaushik, H. Pielet and H. Yin, Nov., p 82

Corus IJmuiden

“Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications” — D. Maldonado, P.R. Austin, P. Zulli and B. Guo, March, p 50

“Recent Developments in Strand Condition Monitoring Devices” — A.I.F. Leek, July, p 84

Corus Research, Development & Technology

“Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The” — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

Corus Strip Products IJmuiden

“Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The” — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

CRA

“HISMELT® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

CRM

“Mechanisms of Work Roll Degradation in Hot Strip Mills” — G. Walmag, X. Vanden Eynde, M. Sinnaeve and V. Lecomte, Aug., p 66

Credit Suisse Group

“Insight Into Steel Consumption in India” — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

D

Danaher Motion

“Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

Danieli

“Interview With Gianpietro Benedetti, Chairman and Chief Executive Officer, Danieli, An” — J. Cantrell, Feb., p 116

“Nucor Memphis SBQ Steel Mill” — T.J. Leczo, Nov., p 31

“Start-Up Experience and Results of Consteel® at the SOVEL Meltshop” — G. Bouganosopoulos, V. Papantoniou and P. Sismanis, Feb., p 38

Danieli Centro Maskin

“Latest Developments in SBQ Cold Processing and Finishing” — S. Lodolo and S. Casco, Sept., p 59

Danieli Corus

“HISMELT® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

“Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation” — B. Edwards, A. Cheng, S. Street, B. Ebner and L. Hausemer, March, p 65

Danieli Morgårdshammar

“Nucor Memphis SBQ Steel Mill” — T.J. Leczo, Nov., p 31

David J. Joseph Co.

“Nucor Memphis SBQ Steel Mill” — T.J. Leczo, Nov., p 31

Davy McKee

“HISMELT® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

Deutscher Verband für Schweisstechnik (German Welding Engineering Association)

“Old Pickling Lines Get New Life With Plastic Tanks” — T.L. Fitzpatrick and W.H. Pugh, Dec., p 58

E

E'cheng Iron & Steel Co.

“Hot Metal Strategies for the EAF Industry” — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

Economy Industrial Corp.

“HISMELT® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

Electric Controller & Manufacturing Co. LLC, The

“Emerging Technology: AC Sourced Magnet Control” — T.R. Creech, June, p 63

Eltra GmbH

“Nucor Memphis SBQ Steel Mill” — T.J. Leczo, Nov., p 31

Energy Information Administration

“Understanding Industrial Electric Bills” — M. Costarell, May, p 253

Energy Star

“Development of an Energy Conservation Program at Severstal North America Inc.” — T. Obrecht, A. Thomas and S. Turcotte, May, p 248

Essar Steel

“Insight Into Steel Consumption in India” — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

Essar Steel Algoma

“Thermomechanical Modeling of Beam Blank Casting” — L.C. Hibbeler, K. Xu, B.G. Thomas, S. Koric and C. Spangler, July, p 60

F

Falcon Foundry

“HISMELT® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

Federal Energy Regulator Commission

“Enhancing the Operation of Highly Varying Industrial Loads to Increase Electric Reliability, Quality and Economics” — R.A. Kramer, R. Shoureshi and E. Arnold, May, p 239

Federal Highway Administration

“Development of High-Performance Steels for Bridge Applications at SSAB North America” — D. Bai, T. Nelson, R. Bodnar, M. Cooke and S. Scumpu, Oct., p 65

Ford Motor Co.

“Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

Freudenberg-NOK

“Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

Friedrich Kocks GmbH & Co. KG

“Further Developments in Wire Rod and Bar Production Using 3-Roll Technology” — S.A. Filippini and W.-J. Ammerling, Sept., p 38

Fuchs

“Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies” — V. Sahajwalla, R. Khanna, M. Zaharia, S. Kongkarat, M. Rahman, B.C. Kim, N. Saha-Chaudhury, P. O'Kane, J. Dicker, C. Skidmore and D. Knights, Apr., p 43

“Toward Integrated Ladle Metallurgy Control,” *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

G

Gantrex

“Fixed vs. Floating Rail Arrangements” — R. Milman and C. Hoppel, June, p 68

GE Water & Process Technologies

“Corrosion: Cause, Effect and Control” — J. Gleason, Apr., p 34

“HISMELT® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

General Physics Corp.

“Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

Genie Industries

“Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

Gerdau MACSTEEL

“Improving Caster Hydraulics Reliability and Reducing Costs With New Synthetic, Fire-Resistant Fluid” — R. Brousseau and T. Vasiliw, Dec., p 65

GPAllied

“Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

H

Haskel

“Production Preparation Process (3P): Lean Concepts for Project Planning” — M. Bresko, Dec., p 35

Hatch Ltd.

“HISMELT® Technology: The Future of Ironmaking” — T. Leczo, March, p 33

List of Companies

Heraeus Electro-Nite

"Further Process Improvements at Severstal Sparrows Point via New Technology Implementation — Moving the Bottlenecks" — R.P. Stone, D. Patterson, D. Neith, S. Koester and R.V. Branion Jr., Nov., p 54

"Inclusion Characterization: A Tool for Measurement of Steel Cleanliness and Process Control" — P. Kaushik, H. Pielet and H. Yin, Nov., p 82

"Toward Integrated Ladle Metallurgy Control," *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

Hismelt Corp. Pty. Ltd.

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Hospet Steel

"Experience With an Innovative On-Line Inclusion Determination System for Liquid Steel" — R.P. Stone, C.C. Liu and P.C. Glaws, July, p 42

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

I

Illinois Institute of Technology

"Investigation of Hot Metal Desulfurization by Mg, An" — Q. Liu, H. Pielet, P. Kaushik and B. Chukwulebe, Nov., p 75

ILVA SpA

"Plant Vehicles Tracking With GPS-DGPS-GPRS Technologies" — C. Iorizzo, L. Speranza and A. Lenardon, Jan., p 58

Indian Iron & Steel Co. (IISCO)

"Insight Into Steel Consumption in India" — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

Inductotherm

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Institute for Steel Development & Growth (INSDAG)

"Insight Into Steel Consumption in India" — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

Ispat Industries

"Insight Into Steel Consumption in India" — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

J

Japan Iron and Steel Federation (JISF)

"Chlorine Behavior of Coal and Waste Plastics During Carbonization" — K. Kato, S. Nomura, K. Fukuda and H. Uematsu, March, p 90

JB Consultoria Ltda.

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

JFE Steel Corp.

"Development of a New Solid-State Joining Process for Endless Hot Rolling" — J.S. Lee, Y-H. Kang, C-S. Won, S-L. Son and K. Horii, Aug., p 48

Ji Nan Iron and Steel Co.

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

Jiangsu Shagang Group

"Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills" — A. Angerbauer, B. Haring and R. Burger, May, p 267

Jiangsu Sunshine Group Co.

"Solving the Insoluble: Electrolytic Tinning Lines With Insoluble Anodes" — G. Astengo and T. DeLoia, Aug., p 75

Jiangyin Xingcheng Steel Works Co. (JYXS)

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

JSW Steel Ltd.

"Insight Into Steel Consumption in India" — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

K

Klöckner Werke

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Kocks Pittsburgh Co.

"Further Developments in Wire Rod and Bar Production Using 3-Roll Technology" — S.A. Filippini and W.-J. Ammerling, Sept., p 38

Koppers

"Contamination Control Pays Big Dividends" — A.L. Kastonek, Dec., p 44

Küttner Energy GmbH

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

L

LABEA Ingenieria y Servicios

"Start-Up Experience and Results of Consteel® at the SOVEL Meltdown" — G. Bouganosopoulos, V. Papantoniou and P. Sismanis, Feb., p 38

LAP Laser LLC

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

LECO Corp.

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

"Toward Integrated Ladle Metallurgy Control," *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

"Hydrogen and Nitrogen Control in Steelmaking at U. S. Steel" — S. Misra, Y. Li and I. Sohn, Nov., p 43

"Inclusion Characterization: A Tool for Measurement of Steel Cleanliness and Process Control" — P. Kaushik, H. Pielet and H. Yin, Nov., p 82

Leica Geosystems AG

"Plant Vehicles Tracking With GPS-DGPS-GPRS Technologies" — C. Iorizzo, L. Speranza and A. Lenardon, Jan., p 58

Lewis Australia

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Liebherr

"Steel Scrap Haulage: A Look at How Advances in Rear-Eject Technology Have Enhanced and Streamlined the Steelmaking Process at Minimills" — J. Swank and L. Hagenbuch, June, p 54

Linde Gas

"25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby — Tubular Products, Ohio" — M. Lantz, D. Hassenzuhl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

Linde LLC

"25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby — Tubular Products, Ohio" — M. Lantz, D. Hassenzuhl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

LOI Inc.

"Quality Aspects of HPH® Annealed Steel Strip" — R. Fielder, P. Wendt and F. Maschler, Jan., p 69

"Solving the Insoluble: Electrolytic Tinning Lines With Insoluble Anodes" — G. Astengo and T. DeLoia, Aug., p 75

LOI Thermprocess GmbH

"Quality Aspects of HPH® Annealed Steel Strip" — R. Fielder, P. Wendt and F. Maschler, Jan., p 69

M

Maanshan Iron & Steel Co. Ltd.

"New Technology for Hot Mill Coil Conveyors" — C. Brockway, June, p 75

MAN Turbo

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Marichal-Ketin

"Mechanisms of Work Roll Degradation in Hot Strip Mills" — G. Walmag, X. Vanden Eynde, M. Sinnaeve and V. Lecomte, Aug., p 66

Maxhütte Stahlwerk

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

McKinsey & Co.

"Toward Integrated Ladle Metallurgy Control," *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

McMaster University

"Toward Integrated Ladle Metallurgy Control," *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

MDI

"U.S. Energy — A Perspective on Resources and Consumption" — J. Stubbles, Oct., p 86

Michigan Manufacturing Technology Center

"Production Preparation Process (3P): Lean Concepts for Project Planning" — M. Bresko, Dec., p 35

Middough Inc.

"Fixed vs. Floating Rail Arrangements" — R. Milman and C. Hoppel, June, p 68

Midrex Corp.

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Minenco Pty. Ltd.

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Minteq Technologies Inc.

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

Missouri University of Science & Technology

"Advancements in Steel for Weight Reduction of P900 Armor Plates," *AIST Transactions* — R.A. Howell, J.S. Montgomery and D.C. Van Aken, July, p 167

"Literature Review of Age Hardening Fe-Mn-Al-C Alloys, A" *AIST Transactions* — R.A. Howell and D.C. van Aken, Apr., p 192

Mitsubishi-Hitachi Metals Machinery Inc.

"Development of a New Solid-State Joining Process for Endless Hot Rolling" — J.S. Lee, Y-H. Kang, C-S. Won, S-L. Son and K. Horii, Aug., p 48

Molyneux Industries Inc.

"Fixed vs. Floating Rail Arrangements" — R. Milman and C. Hoppel, June, p 68

Monsanto Co.

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

MORE srl

"Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies" — V. Sahajwalla, R. Khanna, M. Zaharia, S. Kongkarat, M. Rahman, B.C. Kim, N. Saha-Chaudhury, P. O'Kane, J. Dicker, C. Skidmore and D. Knights, Apr., p 43

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

Morgan Engineering

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

Motorola

"Production Preparation Process (3P): Lean Concepts for Project Planning" — M. Bresko, Dec., p 35

N

Nakayama Steel Works Ltd.

"Development of Amorphous-Alloy Film Coating Using the New Technique of Thermal Spraying," *AIST Transactions* — R. Kurahshi, N. Nagao, M. Komaki, K. Hakomori and M. Kouzaki, June, p 139

National Center for Supercomputing Applications (NCSA)

"Thermomechanical Modeling of Beam Blank Casting" — L.C. Hibbeler, K. Xu, B.G. Thomas, S. Koric and C. Spangler, July, p 60

New South Innovations

"Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies" — V. Sahajwalla, R. Khanna, M. Zaharia, S. Kongkarat, M. Rahman, B.C. Kim, N. Saha-Chaudhury, P. O'Kane, J. Dicker, C. Skidmore and D. Knights, Apr., p 43

Nippon Dioxex

"Chlorine Behavior of Coal and Waste Plastics During Carbonization" — K. Kato, S. Nomura, K. Fukuda and H. Uematsu, March, p 90

Nippon Steel Chemical Co.

"Chlorine Behavior of Coal and Waste Plastics During Carbonization" — K. Kato, S. Nomura, K. Fukuda and H. Uematsu, March, p 90

Nippon Steel Corp.

"Chlorine Behavior of Coal and Waste Plastics During Carbonization" — K. Kato, S. Nomura, K. Fukuda and H. Uematsu, March, p 90

"Development of a New Solid-State Joining Process for Endless Hot Rolling" — J-S. Lee, Y-H. Kang, C-S. Won, S-L. Son and K. Horii, Aug., p 48

"Effect of MnS Distribution on Machinability in Low-C Lead-Free Free-Cutting Steel" — M. Hashimura, A. Mizuno and K. Miyanishi, Sept., p 45

"Suspension Reduction Technology for Ironmaking With Low CO₂ Emission and Energy Requirement," *AIST Transactions* — H.Y. Sohn, M.E. Choi, Y. Zhang and J.E. Ramos, Aug., p 157

Nordberg

"Contamination Control Pays Big Dividends" — A.L. Kastonek, Dec., p 44

North American Electric Reliability Council (NERC)

"Enhancing the Operation of Highly Varying Industrial Loads to Increase Electric Reliability, Quality and Economics" — R.A. Kramer, R. Shoureshi and E. Arnold, May, p 239

Nucor Corp.

"Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The" — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

Nucor Steel-Indiana

"Recent Developments With Ultrathin Cast Strip Products Produced by the Castrip® Process" — D.G. Edelman, P.C. Campbell, C.R. Killmore, K.R. Carpenter, H.R. Kaul, J.G. Williams and W.N. Blejde, Oct., p 47

Nucor Steel Memphis Inc.

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

Nucor Steel Seattle Inc.

"Nucor Steel Seattle: Improvements Resulting From the Modernization of the 4-Strand Billet Caster" — J. Gregord, July, p 33

Nucor Steel Tuscaloosa Inc.

"Improving Caster Hydraulics Reliability and Reducing Costs With New Synthetic, Fire-Resistant Fluid" — R. Brousseau and T. Vasiliw, Dec., p 65

Nucor-Yamato Steel Co.

"EAF Energy Optimization at Nucor-Yamato Steel" — O. Quintanilla and G. Fernandez, Jan., p 78

O

OAo Severstal

"Development of an Energy Conservation Program at Severstal North America Inc." — T. Obrecht, A. Thomas and S. Turcotte, May, p 248

Olympus Corp.

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

OneSteel

"Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies" — V. Sahajwalla, R. Khanna, M. Zaharia, S. Kongkarat, M. Rahman, B.C. Kim, N. Saha-Chaudhury, P. O'Kane, J. Dicker, C. Skidmore and D. Knights, Apr., p 43

List of Companies

O.R.I. Martin

"Start-Up Experience and Results of Consteel® at the SOVEL Meltshop" — G. Bouganosopoulos, V. Papantoniou and P. Sismanis, Feb., p 38

Outokumpu Stainless

"25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio" — M. Lantz, D. Hassenzahl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

Outotec

"HISMELT® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Ovako Steel

"25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio" — M. Lantz, D. Hassenzahl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

P

P&H

"Ultimate Safety Device: A Load Scale on an EOT Crane, The" — R.L. Emery and G.D. Bruder, Apr., p 52

PANalytical

"HISMELT® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

"Toward Integrated Ladle Metallurgy Control," *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

Paul Wurth

"HISMELT® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

"Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation" — B. Edwards, A. Cheng, S. Street, B. Ebner and L. Hausemer, March, p 65

Philippi-Hagenbuch Inc.

"Steel Scrap Haulage: A Look at How Advances in Rear-Eject Technology Have Enhanced and Streamlined the Steelmaking Process at Minimills" — J. Swank and L. Hagenbuch, June, p 54

POSCO

"Development of a New Solid-State Joining Process for Endless Hot Rolling" — J.S. Lee, Y.H. Kang, C.S. Won, S-L. Son and K. Horii, Aug., p 48

Purdue University Calumet

"Construction of a Web-Based Tutorial for 3-D Visualization of Ternary Phase Diagrams" — H. Abramowitz, J. Ye, D. Xu, E. Johnsen, T. Hagen, W. Zhao and M.A. Roller, Oct., p 75

"Enhancing the Operation of Highly Varying Industrial Loads to Increase Electric Reliability, Quality and Economics" — R.A. Kramer, R. Shoureshi and E. Arnold, May, p 239

"Prediction of Blast Furnace Hearth Inner Profiles" — L. Zheng, R. Deshpande, C.Q. Zhou, D. Huang and P. Chaubal, March, p 83

Q

Quad Engineering Inc.

"Investigation Into the Effects of Leveling Roll Diameter Variation on Coupling Shear Pin Breakage of a Hot Plate Leveler" — Y. Liu and M. Levick, Aug., p 82

R

REBS

"Application of Low-Volume Lubrication and Liquid Nitrogen in the Final Stand of a Tandem Cold Mill" — H. Pawelski and H-P. Richter, Aug., p 57

Resonant Solutions

"New Techniques in Steel Meltshop Air Pollution Control" — C.J.L. Els, O. Vorster, C. Coetzee and T.L. Fisher, Feb., p 65

Rio Tinto

"HISMELT® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Riva Group

"Plant Vehicles Tracking With GPS-DGPS-GPRS Technologies" — C. Iorizzo, L. Speranza and A. Lenardon, Jan., p 58

RJ Lee Group

"Investigation of Hot Metal Desulfurization by Mg, An" — Q. Liu, H. Piolet, P. Kaushik and B. Chukwulebe, Nov., p 75

"Toward Integrated Ladle Metallurgy Control," *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

Royal Institute of Technology

"25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio" — M. Lantz, D. Hassenzahl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

RSCConsultants Ltda.

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

S

Saar-Metallwerke GmbH

"HISMELT® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Saarstahl

"HISMELT® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Saldahna Steel

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

"Recent Developments in Strand Condition Monitoring Devices" — A.I.F. Leek, July, p 84

Sarclad Ltd.

"Recent Developments in Strand Condition Monitoring Devices" — A.I.F. Leek, July, p 84

Scana

"25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio" — M. Lantz, D. Hassenzahl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

Seah Besteel

"Further Developments in Wire Rod and Bar Production Using 3-Roll Technology" — S.A. Filippini and W-J. Ammerling, Sept., p 38

Seiko Instruments Inc.

"Chlorine Behavior of Coal and Waste Plastics During Carbonization" — K. Kato, S. Nomura, K. Fukuda and H. Uematsu, March, p 90

Sennebogen

"Steel Scrap Haulage: A Look at How Advances in Rear-Eject Technology Have Enhanced and Streamlined the Steelmaking Process at Minimills" — J. Swank and L. Hagenbuch, June, p 54

SERT METAL USA

"Mold Level System Upgrade at ArcelorMittal Dofasco's No. 1 Caster" — C. Singh, X. Rabec and M. Dussud, July, p 75

Severstal Columbus LLC

"Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The" — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

Severstal North America

"Development of an Energy Conservation Program at Severstal North America Inc." — T. Obrecht, A. Thomas and S. Turcotte, May, p 248

"Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation" — B. Edwards, A. Cheng, S. Street, B. Ebner and L. Hausemer, March, p 65

Severstal Sparrows Point

"Further Process Improvements at Severstal Sparrows Point via New Technology Implementation — Moving the Bottlenecks" — R.P. Stone, D. Patterson, D. Neith, S. Koester and R.V. Branion Jr., Nov., p 54

Severstal Wheeling

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

Shaoguan Iron and Steel

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

Shiheng Special Steel

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

Shingijitsu Consulting

"Production Preparation Process (3P): Lean Concepts for Project Planning" — M. Bresko, Dec., p 35

Shougang Group Corp.

"HISMELT® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

SIDENOR SA

"Start-Up Experience and Results of Consteel® at the SOVEL Meltshop" — G. Bouganosopoulos, V. Papantoniou and P. Sismanis, Feb., p 38

Siemens AG

"Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills" — A. Angerbauer, B. Haring and R. Burger, May, p 267

Siemens Industry Inc.

"Innovative Offgas Cleaning and Recovery Solutions for Steelmaking" — K. Jamek, Nov., p 61

"Old Pickling Lines Get New Life With Plastic Tanks" — T.L. Fitzpatrick and W.H. Pugh, Dec., p 58

Siemens VAI

"HISMELT® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

"Severstal NA Blast Furnace 2007 Revamping: Equipment Design Transforms C BF Into a World-Class Operation" — B. Edwards, A. Cheng, S. Street, B. Ebner and L. Hausemer, March, p 65

Siemens VAI France

"Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills" — A. Angerbauer, B. Haring and R. Burger, May, p 267

Siemens VAI Metals Technologies GmbH

"Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills" — A. Angerbauer, B. Haring and R. Burger, May, p 267

"SIMETAL Ultimate at Colakoglu, Turkey, The" — M. Abel and M. Hein, Feb., p 56

Siemens VAI Montbrison

"Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills" — A. Angerbauer, B. Haring and R. Burger, May, p 267

Sigma International Inc.

"Improving the Quality of Steel Slabs and Billets With Additional Electric Heating Elements" — K.M. Tiitto, J.M. Pyykkonen and P.T. Mantyla, Sept., p 52

Siscol

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

SMS Siemag AG (formerly SMS Demag AG)

"Application of Low-Volume Lubrication and Liquid Nitrogen in the Final Stand of a Tandem Cold Mill" — H. Pawelski and H-P. Richter, Aug., p 57

"New Technology for Hot Mill Coil Conveyors" — C. Brockway, June, p 75

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

"Primary Energy Melting (PEM) — A Hybrid Process Using an Energy-Efficient Technology" — J. Schlüter, U. Falkenreck, J. Kempken and J. Bader, Feb., p 47

"Recent Developments in Strand Condition Monitoring Devices" — A.I.F. Leek, July, p 84

Society of Automotive Engineers

"Effect of MnS Distribution on Machinability in Low-C Lead-Free Free-Cutting Steel" — M. Hashimura, A. Mizuno and K. Miyanishi, Sept., p 45

Sonasid

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

SOVEL SA

"Start-Up Experience and Results of Consteel® at the SOVEL Meltshop" — G. Bouganosopoulos, V. Papantoniou and P. Sismanis, Feb., p 38

Spraying Systems Co.

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

SSAB

"25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby — Tubular Products, Ohio" — M. Lantz, D. Hassenzahl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

SSAB North America

"Development of High-Performance Steels for Bridge Applications at SSAB North America" — D. Bai, T. Nelson, R. Bodnar, M. Cooke and S. Scumpu, Oct., p 65

Steel Authority of India Ltd. (SAIL)

"Insight Into Steel Consumption in India" — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

Steel Dynamics Inc.

"Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The" — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

"Thermomechanical Modeling of Beam Blank Casting" — L.C. Hibbeler, K. Xu, B.G. Thomas, S. Koric and C. Spangler, July, p 60

Sumitomo Metal Industries Ltd.

"Role of Axial Cyclone in Recycling of Blast Furnace Offgas Cleaning System Solid Wastes" — N. Ma, H.R. Kokal and J. Flannery, March, p 76

Sumitomo Metals

"Further Developments in Wire Rod and Bar Production Using 3-Roll Technology" — S.A. Filippini and W.-J. Ammerling, Sept., p 38

Sund Birsta AB

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

T

Tamini

"Start-Up Experience and Results of Consteel® at the SOVEL Meltshop" — G. Bouganosopoulos, V. Papantoniou and P. Sismanis, Feb., p 38

Tata Iron and Steel Co. (TISCO)

"Insight Into Steel Consumption in India" — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

Tata Motors

"U.S. Energy — A Perspective on Resources and Consumption" — J. Stubbles, Oct., p 86

Tenova Strip Processing

"Solving the Insoluble: Electrolytic Tinning Lines With Insoluble Anodes" — G. Astengo and T. DeLoia, Aug., p 75

Ternium

"Suspension Reduction Technology for Ironmaking With Low CO₂ Emission and Energy Requirement," *AIST Transactions* — H.Y. Sohn, M.E. Choi, Y. Zhang and J.E. Ramos, Aug., p 157

Ternium Siderar

"Solving the Insoluble: Electrolytic Tinning Lines With Insoluble Anodes" — G. Astengo and T. DeLoia, Aug., p 75

List of Companies

Thermo Scientific

"Hydrogen and Nitrogen Control in Steelmaking at U. S. Steel" — S. Misra, Y. Li and I. Sohn, Nov., p 43

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

"Toward Integrated Ladle Metallurgy Control," *AIST Transactions* — K.J. Graham and G.A. Irons, Jan., p 163

ThyssenKrupp

"Application of Low-Volume Lubrication and Liquid Nitrogen in the Final Stand of a Tandem Cold Mill" — H. Pawelski and H-P. Richter, Aug., p 57

ThyssenKrupp Stahl AG

"Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills" — A. Angerbauer, B. Haring and R. Burger, May, p 267

Timken Co., The

"Bearing Repair Provides Valuable Alternative to Bearing Replacement for Heavy Industries" — K. Flowers, June, p 85

"Experience With an Innovative On-Line Inclusion Determination System for Liquid Steel" — R.P. Stone, C.C. Liu and P.C. Glaws, July, p 42

"Inclusion Characterization: A Tool for Measurement of Steel Cleanliness and Process Control" — P. Kaushik, H. Piolet and H. Yin, Nov., p 82

TiQ Srl

"Plant Vehicles Tracking With GPS-DGPS-GPRS Technologies" — C. Iorizzo, L. Speranza and A. Lenardon, Jan., p 58

TiQ-Industrial Ltd.

"Plant Vehicles Tracking With GPS-DGPS-GPRS Technologies" — C. Iorizzo, L. Speranza and A. Lenardon, Jan., p 58

TM GE Automation Systems LLC

"AC Drive Cable Selection" — R. Tessendorf, H. Hosoda, K. Fukuma, S. Kodama and T. Ishida, Dec., p 49

"Medium Voltage Drive Application at U. S. Steel Lorain Tubular Operations, No. 3 Seamless Mill" — M.A. DeCarli and R.M. Baker, Jan., p 47

TMT (Tapping Measuring Technology GmbH)

"Hismelt[®] Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Tonghua Iron & Steel Group

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

Toshiba Mitsubishi-Electric Industrial Systems Corp. (TMEIC)

"AC Drive Cable Selection" — R. Tessendorf, H. Hosoda, K. Fukuma, S. Kodama and T. Ishida, Dec., p 49

Toyota Motor Co.

"Production Preparation Process (3P): Lean Concepts for Project Planning" — M. Bresko, Dec., p 35

Trans-Lube

"Fixed vs. Floating Rail Arrangements" — R. Milman and C. Hoppel, June, p 68

Tube City IMS LLC

"Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The" — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

U

U. S. Steel Canada – Lake Erie Works

"Mechanism of Post-Rolling Deterioration in Hot Band Flatness During Coiling, A" — E. Nikitenko and B.C. Gris, Oct., p 60

U. S. Steel Research and Technology Center

"Hydrogen and Nitrogen Control in Steelmaking at U. S. Steel" — S. Misra, Y. Li and I. Sohn, Nov., p 43

"Mechanism of Post-Rolling Deterioration in Hot Band Flatness During Coiling, A" — E. Nikitenko and B.C. Gris, Oct., p 60

U.S. Department of Energy

"Development of an Energy Conservation Program at Severstal North America Inc." — T. Obrecht, A. Thomas and S. Turcotte, May, p 248

"Understanding Industrial Electric Bills" — M. Costarell, May, p 253

U.S. Environmental Protection Agency

"Air Permitting in the Steel Industry — Dodging Potholes in a Deteriorating Road" — R. Geddis, Apr., p 149

"Development of an Energy Conservation Program at Severstal North America Inc." — T. Obrecht, A. Thomas and S. Turcotte, May, p 248

U.S. Navy

"Production Preparation Process (3P): Lean Concepts for Project Planning" — M. Bresko, Dec., p 35

U.S. Office of Naval Research

"Development of High-Performance Steels for Bridge Applications at SSAB North America" — D. Bai, T. Nelson, R. Bodnar, M. Cooke and S. Scumpu, Oct., p 65

UBS Securities LLC

"Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The" — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

Uddeholm Tooling

"25% Increased Reheating Throughput and 50% Reduced Fuel Consumption by Flameless Oxyfuel at ArcelorMittal Shelby – Tubular Products, Ohio" — M. Lantz, D. Hassenzahl, A. Lugnet, G. Moroz and A. Carlsson, Sept., p 29

ULCOS (Ultra-Low Carbon Dioxide Steelmaking)

"Hismelt[®] Technology: The Future of Ironmaking" — T. Leczo, March, p 33

United States Steel Corporation

"Development and Market Introduction of the Second-Generation Chrome-Free Passivated Galvanized Steel, The" — A.H.R. Harmsen, W. Laging, M. Zonneveld, E. Jansen and C.E. Price, Aug., p 37

"Medium Voltage Drive Application at U. S. Steel Lorain Tubular Operations, No. 3 Seamless Mill" — M.A. DeCarli and R.M. Baker, Jan., p 47

United States Steel Corporation, Minnesota Ore Operations–Keetac

"Contamination Control Pays Big Dividends" — A.L. Kastonek, Dec., p 44

United Technologies

"Production Preparation Process (3P): Lean Concepts for Project Planning" — M. Bresko, Dec., p 35

University of Denver

"Enhancing the Operation of Highly Varying Industrial Loads to Increase Electric Reliability, Quality and Economics" — R.A. Kramer, R. Shoureshi and E. Arnold, May, p 239

University of Illinois at Urbana-Champaign

"Thermomechanical Modeling of Beam Blank Casting" — L.C. Hibbeler, K. Xu, B.G. Thomas, S. Koric and C. Spangler, July, p 60

University of New South Wales

"Environmentally Sustainable EAF Steelmaking Through Introduction of Recycled Plastics and Tires: Laboratory and Plant Studies" — V. Sahajwalla, R. Khanna, M. Zaharia, S. Kongkarat, M. Rahman, B.C. Kim, N. Saha-Chaudhury, P. O'Kane, J. Dicker, C. Skidmore and D. Knights, Apr., p 43

"Modeling Coal Combustion Behavior in an Ironmaking Blast Furnace Raceway: Model Development and Applications" — D. Maldonado, P.R. Austin, P. Zulli and B. Guo, March, p 50

University of Oulu

"Improving the Quality of Steel Slabs and Billets With Additional Electric Heating Elements" — K.M. Tiitto, J.M. Pyykkonen and P.T. Mantyla, Sept., p 52

University of Tokyo, The

"Thermodynamic Properties of Liquid Fe-B and Fe-B-C Alloys," *AIST Transactions* — A. Semih Sunkar and K. Morita, Feb., p 164

University of Utah

"Suspension Reduction Technology for Ironmaking With Low CO₂ Emission and Energy Requirement," *AIST Transactions* — H.Y. Sohn, M.E. Choi, Y. Zhang and J.E. Ramos, Aug., p 157

Ural Steel

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

V

Vacmetal

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Voest-Alpine Industrial Services

"Thermomechanical Modeling of Beam Blank Casting" — L.C. Hibbeler, K. Xu, B.G. Thomas, S. Koric and C. Spangler, July, p 60

voestalpine Stahl

"Modernization and Upgrading of Existing Plants — A Decisive Factor in the Field of Hot Strip Mills" — A. Angerbauer, B. Haring and R. Burger, May, p 267

Volkswagen

"Production Preparation Process (3P): Lean Concepts for Project Planning" — M. Bresko, Dec., p 35

VSIL

"Insight Into Steel Consumption in India" — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

W

W.L. Gore & Associates

"New Techniques in Steel Meltshop Air Pollution Control" — C.J.L. Els, O. Vorster, C. Coetzee and T.L. Fisher, Feb., p 65

W.L. Gore & Associates SA (Pty) Ltd.

"New Techniques in Steel Meltshop Air Pollution Control" — C.J.L. Els, O. Vorster, C. Coetzee and T.L. Fisher, Feb., p 65

Wako Pure Chemical Industries

"Chlorine Behavior of Coal and Waste Plastics During Carbonization" — K. Kato, S. Nomura, K. Fukuda and H. Uematsu, March, p 90

Wheelabrator Group

"Nucor Memphis SBQ Steel Mill" — T.J. Leczo, Nov., p 31

Williams Crusher & Pulverizer Co. Inc.

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

Woodings Industrial Corp.

"Hismelt® Technology: The Future of Ironmaking" — T. Leczo, March, p 33

World Steel Association

"Insight Into Steel Consumption in India" — Y.S.S. Rao, M. Ranjan and R. Barbhaya, Apr., p 20

WorleyParsons Gas Cleaning

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

Wuxi Tristar Iron & Steel

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

X

Xining Special Steels Group

"Hot Metal Strategies for the EAF Industry" — R. Santos Sampaio, J. Jones and J. Batista Vieira, Feb., p 31

Y

Youngstown State University

"Understanding Industrial Electric Bills" — M. Costarell, May, p 253

Thickness & Coating Weight Gauges

A circular graphic with a globe in the center. The words "MEASURING" and "SUCCESS" are written in large, bold letters around the top and bottom of the globe. The globe is divided into four quadrants, each with text describing a service area: "Perfecta - PLC Open Architecture", "Accura - PC Win XP Based", "X-Ray & Isotope", "Hot/Cold Rolling Mills", "Galvanizing Lines", "Process Lines", "In-house Calibration", "ISO 9000 - IEC 17025", "Metals - Plastics - Ceramics", "Worldwide Service", "24 hours - 365 Days a Year", and "GGC Centers in US, Europe & Asia".

Global Gauge CORPORATION

World Headquarters 131 Wayne Ave. Dayton, Ohio 45402

Tel (937) 254-3500 Fax (937) 254-0114

sales@globalgauge.com www.globalgauge.com



Electrostatic Precipitators

Rotary Kiln

Fans

Air Systems Limited

A Company that provides One-Stop Shop Solutions for Electrostatic Precipitators, Fans, Kilns, Replacement parts, Site Inspections and Retrofit services.

We are a leading engineering company and prominent supplier to 500+ customers in India and abroad, especially in the cement, power, pulp, steel and copper industries.

An ISO 9001: 2000 Registered



nka@asplparts.com www.asplparts.com