

### Non-Ferrous Rolling

"Determination of Boiling Behavior of Rolling Emulsions on Hot Aluminum Slab," *The 71<sup>st</sup> Annual STLE Meeting in Las Vegas, NV*. May 2016, Robert Blithe, Brook Zaback and Kris Januszkiewicz

"Stain Potential: Aluminum Cold Rolling Applications," *The 71<sup>st</sup> Annual STLE Meeting in Las Vegas, NV*. May 2016, Steve Wheeler, Tony Noblit, and Bob Blithe

"Measurement of Volatile Organic Content in Non-Ferrous Metal Forming Fluids by ThermoGravimetric Analysis," *The 66<sup>th</sup> Annual STLE Meeting in Atlanta, GA*. May 2011, Robert Blithe, John Burke

"Non-Ferrous Hot Rolling Lubrication: The Next Generation," *The 68<sup>th</sup> Annual STLE Meeting in Detroit, MI*. May 2013, Robert Blithe

"Emulsion Stability: Impact in Non-Ferrous Rolling Applications," *The 69<sup>th</sup> Annual STLE Meeting in Orlando, FL*. May 2014, Robert Blithe

### Metal Removal

"The Tribological Effects of Metal Removal Fluids Diluted with Purified Water versus Hard Water," *The 5<sup>th</sup> International Conference on Metal Removal Fluids in Rosemont, IL*, September 2015, Alan Cross

"Determination of the Corrosive Effects of Reverse Osmosis Purified Water versus High Mineral Content Water When Mixed with Metalworking Fluids," *The 70<sup>th</sup> Annual STLE Meeting in Dallas, TX*, May 2015, Alan Cross

"A Method to Predict a Metal Removal Fluid's Impact in a Production Facility," *The 68<sup>th</sup> Annual STLE Meeting in Detroit, MI*, May 2013, Alan Cross

"The Tribological Effects of Metal Removal Fluids Diluted with Purified Water Versus Hard Water," *The 69<sup>th</sup> Annual STLE Meeting in Orlando, FL*, May 2014, Alan Cross

"Alternatives to Chlorinated Paraffins in Metalworking Fluids: A Case Study," *The 71<sup>st</sup> Annual STLE Meeting in Las Vegas, NV*. May 2016, Shilpa Beesabathuni and Yixing (Philip) Zhao

"Relationship of HLB Values of Surfactants with Emulsion Stability and Foam of Metal Cutting Fluids," *The 71<sup>st</sup> Annual STLE Meeting in Las Vegas, NV*. May 2016, Yixing (Philip) Zhao, Mai Nguyen, and Shilpa Beesabathuni

"A New Method for the Determination of Volatile Organic Compounds in Metalworking Fluids, Vanishing Oils and Rust Inhibitors," *The 66<sup>th</sup> Annual STLE Meeting in Atlanta, GA*. May 2011, John Burke

"Overview and Implications for VOC Regulations, California South Coast Air Quality Management District Rule 1144 Update," *The 67<sup>th</sup> Annual STLE Meeting in St. Louis MO*. May 2012, John Burke

"Extraneous Oils, Contamination Effects, and Control Practices," *The 68<sup>th</sup> Annual STLE Meeting in Detroit, MI*. May 2013, John Burke

"Metal Working and Particle Size Considerations," *The 68<sup>th</sup> Annual STLE Meeting in Detroit, MI*. May 2013, John Burke

"The Future of Metalworking Fluids; The Next Ten Years," *The 68<sup>th</sup> Annual STLE Meeting in Detroit, MI*, May 2013, John Burke

"Advantages and Disadvantages of Low VOC Vegetable Based Metalworking Fluids," *The 68<sup>th</sup> Annual STLE Meeting in Detroit, MI*, May 2013, John Burke, Alan Cross

"Metalworking Fluid Sump/System Cleaning," *The 71<sup>st</sup> Annual STLE Meeting in Las Vegas*, May 2016, John Burke

"The Waste Treatment of Metalworking Fluids", *The 71<sup>st</sup> Annual STLE Meeting in Las Vegas*, May 2016, John Burke

"Understanding and Controlling Metalworking Fluid Failure," *The 2.5 Day STLE Education Course Philadelphia PA March 2016*

"Metalworking Fluid Operations Overview," *The 2.5 Day STLE Education Course Philadelphia PA March 2016*

"Metal Removal Fluids and Machine Tool Fluid System Design," *The 2.5 Day STLE Education Course Philadelphia PA March 2016*

"The Tribological Effects of Metal Removal Fluids Diluted With Purified Water versus Hard Water," *The 69<sup>th</sup> STLE Annual Meeting, Lake Buena Vista FL 2014*, John Burke, Alan Cross, Valerie Pearson

"Managing Metalworking Fluids from Cradle to Grave, Fluid supplier's and End User's Responsibilities," *The 70<sup>th</sup> STLE Annual Meeting, Dallas TX 2015*, John Burke

"Achieving Zero Wastewater Discharge from Production Facilities That Use Metalworking Fluids," *European Forum on Metalworking Fluids 2011, Frankfurt Germany*

#### Waste Treatment

"Treating Complex Oily Wastewater for Reuse with a Unique Two-stage Process," *The 5<sup>th</sup> International Conference on Metal Removal Fluids in Rosemont, IL*, September 2015, Alan Cross

#### Hydraulic Fluids

"Design Considerations for an Environmentally Friendly Hydraulic Fluid," *The 66<sup>th</sup> Annual STLE Meeting in Atlanta, GA*, May 2011, Alan Cross

#### Metal Finishing

"Acid Etch," *Tenth International Aluminum Extrusion Technology Seminar and Exposition ET12 in Miami Beach, FL* May 2012, Linda Newman

"Acid Etch Update and Process Improvements," *Annual Aluminum Anodizers Conference and Exposition in Pittsburg, PA* September 2014, Linda Newman

"Acid Etch Update and Process Improvements," *Eleventh International Aluminum Extrusion Technology Seminar and Exposition ET16 in Chicago, IL* May 2016, Linda Newman

"Anodizing Basics," *AEC Academy, Eleventh International Aluminum Extrusion Technology Seminar and Exposition ET16 in Chicago, IL* May 2016, Linda Newman and Daryl Jones

### **Heat Treatment**

"Effect of Alloy on the Distortion of Oil Quenched Automotive Pinion Gears," *International Conference on Thermal Process Modeling and Computer Simulation*, Shanghai, China, 2010, D.S. MacKenzie and B.L. Ferguson

"Selection of Quenchants," *Journal of International Federation of Heat Treatment and Surface Engineering*, vol. 8, pp 8-14, 2014, D.S. MacKenzie

"Beer, Blood and Urine – Mythological Quenchants of Ancient Blacksmiths," *23<sup>rd</sup> IFHTSE Heat Treatment and Surface Engineering Conference*, Savannah, GA, April 18-21, 2016, D.S. MacKenzie and G. Graham

"Selection of Oil Quenchants for Heat Treating Processes," *23<sup>rd</sup> IFHTSE Heat Treatment and Surface Engineering Congress*, Savannah, GA, April 18-21, 2016, D.S. MacKenzie

"Metallurgic Aspects of Distortion and Residual Stresses in Heat Treated Parts," *23<sup>rd</sup> IFHTSE Heat Treatment and Surface Engineering Congress*, Savannah, GA, April 18-21, 2016, D.S. MacKenzie

"Failure Analysis of an Automotive Crankshaft," *European Conference on Heat Treatment and Surface Engineering*, Prague, Czech Republic, May 11-13, 2016, D.S. MacKenzie

"Care and Maintenance of Oil Quenchants used for Quenching Automotive Components," *European Conference on Heat Treatment and Surface Engineering*, Prague, Czech Republic, May 11-13, 2016, D.S. MacKenzie

"An Evaluation of ASTM D6200," *3<sup>rd</sup> Mediterranean Conference on Heat Treatment and Surface Engineering*, Portoroz, Slovenia, September 26-28, 2016, D.S. MacKenzie

"Failure Analysis of an Arresting Hook Shank," *3<sup>rd</sup> Mediterranean Conference on Heat Treatment and Surface Engineering*, Portoroz, Slovenia, September 26-28, 2016, D.S. MacKenzie

"Application of Computational Fluid Dynamics to the Design of Quench Systems," *5<sup>th</sup> Asian Conference on Heat Treatment and Surface Engineering*, Hangzhou, China, November 12-14, 2016, D.S. MacKenzie

"Application of Vegetable-Based Quench Oils to Achieve Safety and Environmental Advantages," *28<sup>th</sup> ASM Heat Treatment Society Conference and Exposition*, Detroit, MI, October 20-22, 2015, J. Nebbe and D.S. MacKenzie

"Uphill Quenching of Aluminum Alloys – A Process Review," *23<sup>rd</sup> IFHTSE Congress on Heat Treatment and Surface Engineering*, Savannah, GA, April 18-21, 2016, W.S. Mattos, G.E. Totten, D.S. MacKenzie, L.C. Canale and T. Croucher

"Effect of Contamination on the Cooling Rate of Quench Oils," *Proc. From the 6<sup>th</sup> International Quenching and Control of Distortion Conf.*, Chicago, IL, September 9-13, 2012, D.S. MacKenzie, G. Graham and J. Jankowski

"Comparison of the Flow Properties of the Drayton and Tensi Quench Test," *Proc. 6<sup>th</sup> International Quenching and Control of Distortion Conf.*, Chicago, IL, September 9-13, 2012, A.L. Banka and D.S. MacKenzie

"Effect of Oil Contamination on Pinion Gear Distortion," *Proceedings from the 6<sup>th</sup> International Quenching and Control of Distortion Conf.*, Chicago, IL, September 9-13, 2012

"Effect of Oil Contamination on Pinion Gear Distortion," *Proc. From the 6<sup>th</sup> International Quenching and Control of Distortion Conf.*, Chicago, IL, September 9-13, 2012, B.L. Ferguson and D.S. MacKenzie

"Extending the Life of Polymer Quenchants: Cause and Effect of Microbiological Issues," *Proc. From the 6<sup>th</sup> International Quenching and Control of Distortion Conf.*, Chicago, IL, September 9-13, 2012, J. Barbieri, C. Faulkner and D.S. MacKenzie

"Parameters Effecting Submerged Plumes in Quench Systems," *Proc. From the 5<sup>th</sup> International Conference on Thermal Process Modeling and Computer Simulation*, Orlando, FL, 2014, A.L. Banka and D.S. MacKenzie

"Cleaning for Heat Treating," *Proc. 26<sup>th</sup> ASM Heat Treating Society Conf.*, Cincinnati, OH, October 31-November 2, 2011, D.S. MacKenzie and R. Johnston

"Evaluation of Flow Fields and Orientation Effects Around Ring Geometries During Quenching," *J. Mat. Eng. Performance*, volume 22, no 7, pp. 1816-1825, 2013, A.L. Banka, B.L. Ferguson and D.S. MacKenzie

"Oxidation of Quench Oil," in *ASM Heat Treating Society 27<sup>th</sup> Conference and Exposition*, Indianapolis, IN, September 16-18, 2013, D.S. MacKenzie

"Oxidation of Quench Oil," in *ASM Heat Treating Society 27<sup>th</sup> Conference and Exposition*, Indianapolis, IN, September 16-18, 2013, D.S. MacKenzie

"Sizing Quench Tanks for Batch Immersion Quenching," *Advanced Materials and Processes*, volume 172, no. 6, pp. 42-44, 2014, D.S. MacKenzie

"Effect of Contamination on the Heat Transfer of Quench Oils," *6<sup>th</sup> International Conference on Quenching and Control of Distortion*, Chicago, IL, September 9-11, 2012, D.S. MacKenzie

"Failure Analysis of a 1990 Mazda Miata Crankshaft and Timing Pulley Bolt," *Journal of Failure Analysis and Prevention*, volume 11, no. 3, pp. 197-207, 2011, D.S. MacKenzie

"Quenchants Used for Heat Treating of Ferrous Alloys," *Steel Heat Treating Technologies*, volume 4B, J.L. Dossett and G.E.Totten, Eds., Materials Park, OH; *ASM International*, pp, 255-280, 2014, D.S. MacKenzie

"Quenchant Agitation, Design and Characterization," *Steel Heat Treating Technologies*, J.L. Dossett and G.E.Totten, Eds., Materials Park, OH; *ASM International*, pp, 281-303, 2014, D.S. MacKenzie

"Metallurgy of Heat Treatable Aluminum Alloys," *Heat Treating of Nonferrous Alloys*, volume 4E, G.E.Totten and D.S. MacKenzie, Eds., Materials Park, OH; *ASM International*, to be published Fall 2016

"Quenching of Aluminum Alloys," *Heat Treating of Nonferrous Alloys*, volume 4EJ.L. Dossett and G.E.Totten, Eds., Materials Park, OH; *ASM International*, to be published Fall 2016

"Quench Factor Analysis," *Heat Treating of Nonferrous Alloys*, volume 4E, G.E.Totten and D.S. MacKenzie, Eds., Materials Park, OH; *ASM International*, to be published Fall 2016

"Quench Sensitivity of Aluminum Alloys," *Heat Treating of Nonferrous Alloys*, volume 4EJ.L. Dossett and G.E.Totten, Eds., Materials Park, OH; *ASM International*, to be published Fall 2016

"An Examination of the ASTM D 6482 (Tensi Method) for Evaluating Polymer Quenchants," *European Conference on Heat Treatment & 22<sup>nd</sup> IFHTSE Congress*, Venice, Italy, May 20-22, 2015