

CURRICULUM VITAE OF BRIAN R. NETTLETON, P.E.

November 2017

I. General Information

A. Position: Senior Electrical Engineer
Semke Forensic
154 Hughes Lane
St. Charles, Missouri
Telephone: 636-896-9995

II. Professional Summary

A. Education: Bachelor of Science – Cum Laude
Electrical Engineering
University of Missouri
Rolla, Missouri
1992

B. Experience:

November 2005 to Present
Position: Senior Electrical Engineer
Semke Forensic
154 Hughes Lane
St. Charles, Missouri

Responsible for electrical engineering projects including failure analysis of components and equipment to determine their role in an event or fire, evaluation of electrical shock and electrocution incidents and assessment of electrical equipment damage due to lighting strikes or water intrusion.



March 2002 to October 2005

Position: Electrical Engineer
Penta Engineering Corporation
St. Louis, Missouri

Responsible for electrical design projects in the cement and mining industry including cost estimates, definition of scope of work, bid sets and construction sets. Projects also included PLC and HMI programming as well as field start-up and commissioning assistance.

March 2000 to March 2002

Position: Electrical Superintendent
Holnam
Clarksville, Missouri

Responsible for the supervision of an electrical staff and the monitoring of all electrical aspects of the plant from analyzers and instrumentation/control to 6600 horsepower mill motors and 13,800 volt switch-gear. Developed preventive maintenance plans for various pieces of equipment such as motors, large breakers, switchgear and electrostatic precipitators. Developed long range plans for necessary maintenance, replacement and installation of equipment and the necessary training within the electrical department. Defined scope of projects for on-site electrical contractors. Also responsible for four nuclear gauges used throughout the plant for process control.

May 1999 to March 2000

Position: Plant Engineer/Mechanical Maintenance Supervisor
Holnam
Morgan, Utah

Responsible for the supervision of thirteen mechanical maintenance men. Also supervised electrical and mechanical projects and worked with contractors to monitor projects to completion. Planned the mechanical portion of kiln outages and coordinated with production to accomplish the outage.



September 1998 to May 1999

Position: Maintenance Superintendent
Holnam
Morgan, Utah

Responsible for providing leadership, guidance, and direction for the plant maintenance including mechanical, electrical, and engineering departments. Assisted in the implementation and continuous development of the company's maintenance program, Maintenance Cement (MaC). Provided input into the development and vision of the plant's direction and coordinated the development of a maintenance plan and budget.

August 1992 to September 1998

Position: Electrical Engineer
Holnam
Clarksville, Missouri

Responsible for the supervision of ten electricians while filling in for the electrical supervisor as necessary. Kept kiln gas analyzers certified to EPA specifications for burning hazardous waste fuels, reviewed all PLC programming and electrical prints for new installations/projects and assisted in troubleshooting problems with equipment throughout the plant. Extensively involved with plant automation project at Clarksville plant where two finish mills, one raw mill and a wet kiln were connected to PLC's and optimized with high-level computer control systems. Worked in the control room as a Production Supervisor, which consisted of burning the kiln and supervising the mill operators and shift personnel.

III. Seminars and Technical Courses Attended

1992 - New Miner Mine Safety and Health Administration (MSHA)
1992 - Modicon PLC Programming Level 1
1992 - Introduction to UNIX
1993 - Mine Safety and Health Administration (MSHA)
1993 - G2 Expert Systems Programming Level 1
1993 - G2 Expert Systems Programming Level 2
1993 - Foxboro PID Loop Tuning
1994 - Mine Safety and Health Administration (MSHA)
1994 - Linkman Toolkit Programming

Seminars and Technical Courses Continued

- 1995 - Mine Safety and Health Administration (MSHA)
- 1995 - Radiation Safety Officer Training
- 1995 - Rexroth's Introduction to Hydraulics
- 1996 - Mine Safety and Health Administration (MSHA)
- 1996 - Neundorfer Precipitator Optimization 1
- 1996 - G.E. DC2000 Drives School
- 1997 - Mine Safety and Health Administration (MSHA)
- 1997 - Holderbank Cement Course
- 1997 - Neundorfer Precipitator Optimization 2
- 1998 - Mine Safety and Health Administration (MSHA)
- 1998 - Mill Optimization Workshop
- 1999 - Mine Safety and Health Administration (MSHA)
- 1999 - Leadership1
- 1999 - Industrial Hydraulics
- 1999 - Coaching and Communication for Improved Performance
- 2000 - Mine Safety and Health Administration (MSHA)
- 2000 - WonderWare/Intouch Programming
- 2000 - Linkman Optimization Programming
- 2000 - Texas Nuclear Site Specific Training on Nuclear Gauges
- 2001 - Mine Safety and Health Administration (MSHA)
- 2001 - Concept Software Programming
- 2001 - Electrostatic Precipitator Maintenance
- 2002 - Mine Safety and Health Administration (MSHA)
- 2002 - First Aid and CPR Training
- 2003 - Mine Safety and Health Administration (MSHA)
- 2004 - Mine Safety and Health Administration (MSHA)
- 2005 - Mine Safety and Health Administration (MSHA)
- 2005 - First Aid and CPR Training
- 2005 - AutoCAD/Inventor Training
- 2006 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri
- 2006 - Fire & Arson Conference, IAAI, Illinois Chapter, Champaign, Illinois
- 2006 - Investigation of Gas and Electric Appliance Fires, Fire Findings
- 2007 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri
- 2007 - Fire & Arson Conference, IAAI, Illinois Chapter, Collinsville, Illinois
- 2007 - National Fire Alarm Code (NFPA 72) Seminar, NFPA, St. Louis, Missouri
- 2008 - Fire & Arson Conference, IAAI, Illinois Chapter, Fairview Heights, Illinois
- 2008 - 2008 National Electrical Code (NEC) Essentials, NFPA, Oklahoma City, Oklahoma

Seminars and Technical Courses Continued

- 2009 - National Fire, Arson & Explosion Investigation Training Program, NAFI, Denver, Colorado
- 2009 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri
- 2010 - 21st Annual National Arson Investigation Training Seminar, ICAC, Savannah, Georgia
- 2010 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri
- 2010 - Inspection Testing and Maintenance of Fire Alarms (NFPA 72) Seminar, NFPA, St. Louis, Missouri
- 2010 - Inspection Testing and Maintenance of Water-Based Fire Protection Systems (NFPA 72) Seminar, NFPA, St. Louis, Missouri
- 2011 - 22nd Annual National Arson Investigation Training Seminar, ICAC, Nashville, Tennessee
- 2011 - Advanced Insurance Fraud Seminar, NSPII, St. Louis, Missouri
- 2011 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri
- 2011 - Vehicle Fire, Arson & Explosion Investigation Science & Technology Seminar, NAFI, Lexington, Kentucky
- 2012 - Electrical Standard for Industrial Machinery (NFPA 79) Seminar, NFPA, St. Louis, Missouri
- 2012 - Fire & Arson Conference, IAAI, Illinois Chapter, Fairview Heights, Illinois
- 2012 - Advanced Insurance Fraud Seminar, NSPII, St. Louis, Missouri
- 2012 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri
- 2013 - Fire & Arson Conference, IAAI, Illinois Chapter, Fairview Heights, Illinois
- 2013 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri
- 2013 - Advanced Insurance Fraud Seminar, NSPII, St. Louis, Missouri
- 2014 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri
- 2015 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri
- 2016 - Fire & Arson Conference, IAAI, Missouri Chapter, Lake Ozark, Missouri

IV. Professional Affiliations

- National Fire Protection Association (NFPA)
- International Association of Arson Investigators, Inc. (IAAI)
- National Association of Fire Investigators (NAFI)

V. Professional Registration

Registered Professional Engineer in the States of Missouri, Illinois, Arkansas, Kansas, and Michigan

VI. Certifications

Certified Fire and Explosion Investigator (CFEI) and Certified Vehicle Fire Investigator (CVFI) – National Association of Fire Investigators (NAFI)

VII. Courses Instructed

NFPA 921 Chapters 8 and 24, March 2012, IAAI-CFI preparatory class for the Kansas chapter of the IAAI.

NFPA 921 Chapters 8 and 24, September 2012, IAAI-CFI preparatory class for the Kansas chapter of the IAAI.

Vehicle Fire Investigation, March 2013, Central Illinois Fire Investigator Association (CIFIA), Peoria, Illinois.

Lightning Damage Assessment, May 2013, Shelter Insurance, Ellisville, Missouri.

NFPA 921 Chapters 8 and 24, June 2013, IAAI-CFI preparatory class for the Kansas chapter of the IAAI.

Electrical Evaluations, May 2014, Shelter Insurance, Columbia, Missouri.

NFPA 921 Chapters 9 and 26, September 2014, IAAI-CFI preparatory class for the Kansas chapter of the IAAI.

Lightning Damage Assessment, November 2014, Shelter Insurance, Columbia, Missouri.

NFPA 921 Chapters 9 and 26, May 2015, IAAI-CFI preparatory class for the Kansas chapter of the IAAI.

VIII. Publications

Co-authored paper for World Cement magazine titled “Reliable Ball Mill Optimization”, May 2004.