

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

June 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)
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- 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 - 21<sup>st</sup> 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 - 22<sup>nd</sup> 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.