

# Paul Neumann, P.E., CMRP, ASP Principal Consulting Engineer

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www.INNEXengineering.com

#### PROFESSIONAL SUMMARY

- Bachelor of Science, Mechanical Engineering University of Illinois
- State of Texas Professional Engineer License No. 156008
- State of Illinois Professional Engineer License No. 62077577
- Certified Maintenance and Reliability Professional (CMRP) Certification No. 1050690
- Board of Certified Safety Professionals Associate Safety Professional (ASP) Cert No. ASP-41382
- Certified Automotive Service Excellence (ASE) Technician in Passenger Car/Light Truck and Heavy-Duty Truck
- Occupational Safety and Health Administration (OSHA)
  - 132 Hour Occupational Safety and Health Professional
  - o 192 Hour Construction Safety and Health Professional
  - 233 Hour Oil and Gas Safety Health Professional
  - o OSHA Class 1-7 Powered Industrial Trucks: Train the Trainer Certification
  - o OSHA Competent Person for Scaffolding, Fall Protection, and Excavation & Trench
- Apprentice Electrician State of Texas License No. 768259
- 20 plus years of practical, technical, academic, and operational experience in engineering applications, industrial plant safety, workplace safety, construction worksite safety, process safety management, fixed machinery, rotating machinery, glass lined equipment, electrical systems, instrumentation, pressure-relief systems, materials handling equipment, Maintenance and Reliability programs, warehouse operations, and inspection and maintenance of semi-trailers, tank trailers, and yard mules. Technical and managerial Industry experience in budgets, schedules, managing maintenance, reliability, inspection (API certified inspectors), condition monitoring, and pressure safety valve (National Board VR Stamp) departments, as well as managed contractors (union and non-union), developing maintenance, inspection, and reliability procedures. Performed Process Hazard Analyses (PHA's), Mechanical Integrity PSM compliance audits, and Failure Mode and Effect Analysis (FMEA).
- Extensive experience with repair and restoration of passenger vehicles, motorcycles, commercial motor vehicles, heavy equipment, recreational vehicles, small machinery, and agricultural tractors and equipment.
- Primary areas of consultation: Industrial/Refinery/Plant workplace and jobsite safety,

ANSI/OSHA/ASTM/ASME compliance, Failure Modes and Effects Analysis (FMEA), Design Failure Mode Analysis (DFMEA), Process Hazard Analysis (PHA), mechanical design analysis, Off-Highway Vehicles (OHV), recreational vehicles, inspection and maintenance of semi-trailers, tank trailers, yard mules, heavy construction and materials handling equipment.

#### **EMPLOYMENT RECORD**

#### 2025 – INNEX ENGINEERING

Present

Principal Consulting Engineer: Consulting with law firms, corporations, and risk managers as an expert witness, conducting investigations and providing deposition, and trial testimony. Analysis of workplace safety claims in Plants, refineries, construction and industrial environments, including industrial plant safety, workplace safety, construction worksite safety, process safety management, and engineering technical specifications. Perform incident site and equipment inspections, documenting incident scenes/sites (including rapid response), perform compliance audits regarding applicability and/or compliance with OSHA, API, ASTM, ASME, ANSI, State and Federal statutes, and other applicable standards of care within the industry, the standards of care within the workplace safety, equipment, inspections, maintenance, and service industries.

# 2023 – ADVANCED ANALYSIS ASSOCIATES

Present

Senior Consulting Engineer: Consulting with law firms, corporations, and risk managers as an expert witness, conducting investigations and providing deposition, and trial testimony. Analysis of workplace safety claims in Plants, refineries, construction and industrial environments, including industrial plant safety, workplace safety, construction worksite safety, process safety management, and engineering technical specifications.

# 2022 - 2023 SOLUGEN

Maintenance & Reliability Director: Led the Maintenance and Reliability Department and ensuring safety and compliance, department budget, metrics, maintenance/reliability capital projects, emergency response Leadership team. Performed Root Cause Failure analysis, reliability upgrades, major overhauls, technical troubleshooting, and technician field training. Technical responsibility for all stationary, rotating, instrumentation, and electrical equipment.

#### 2020 – 2022 NOURYON CHEMICALS

Global Maintenance & Reliability Director: Conceptualizing and executing global strategic equipment and machinery maintenance and reliability vision and programs for implementation, training, and auditing across 62 plants worldwide. Developed corporate standards, implemented Industry Best Practices driving compliance, quality, and Operational Excellence. Performed OSHA 1910.119 Mechanical Integrity PSM compliance audits. Directed and trained engineers on Failure Mode and Effect Analysis (FMEA).

# 2012 - 2020 STEPAN COMPANY

Global Maintenance & Reliability Manager: Collaboratively conceptualizing and executing the global strategic equipment and machinery maintenance and reliability vision and programs for implementation, training, and auditing across 18 plants worldwide. Developed corporate standards, implemented Industry Best Practices driving compliance, quality, and Operational Excellence. M&A Due Diligence team

member.

Maintenance & Reliability Superintendent: Managed Stepan's largest plant (60% of Revenue) Maintenance and Reliability Department. Ensured safety and compliance, department budget, metrics, maintenance/reliability capital projects, emergency response Leadership team, regulatory audits, and implementation of maintenance workflow program. Participated in Union Maintenance Contract negotiations.

Corporate Maintenance Specialist: Developed corporate standards and adherence to Industry Best Practices driving compliance, quality, and Operational Excellence. Performed Fitness for Service calculations, equipment design, troubleshooting, and repairs, and performed OSHA 1910.119 Mechanical Integrity PSM audits.

### 2003 – 2012 LYONDELLBASELL

Mechanical Integrity and Condition Monitoring Supervisor: Safety and compliance, department budget, establishing KPIs, developing equipment inspection standards and programs, QA/QC, CAPEX projects, and Turnaround field coordinator and engineer. Inspection group consisted of fully certified API 510, API 570, API 653, AWS Certified Welding Inspector and NBBI VR stamp shop. Condition monitoring group included Vibration Institute Category II and Thermography certification Level II.

Mechanical Integrity Engineer: Performed stationary equipment fitness for service remaining life calculations, API inspection report reviews/signoff, API/RBI program owner, inspection standards development, incident investigations, performed Root Cause Failure Analysis (RCFA), corrosion analysis, ensure compliance to OSHA 1910.119, and conduct and participate in OSHA VPP and other agency audits.

Maintenance Engineer

# CERTIFICATIONS, AWARDS, AND ASSOCIATIONS

- State of Texas Professional Engineer License No. 156008
- State of Illinois Professional Engineer License No. 062077577
- Society of Maintenance & Reliability Professionals Certified Maintenance and Reliability Professional (CMRP) Certification No. 1050690
- Board of Certified Safety Professionals Associate Safety Professional (ASP) Cert No. ASP-41382
- Board Certified Forensic Engineer by National Academy of Forensic Engineers Member No. 1351
- National Society of Professional Engineers
- Occupational Safety and Health (OSHA) 132 Hour, Occupational Safety and Health Professional
- Occupational Safety and Health (OSHA) 162 Hour, Construction Safety and Health Professional
- Occupational Safety and Health (OSHA) 233 Hour, Oil and Gas Safety Health Professional
- Occupational Safety and Health (OSHA) Class 1-7 Powered Industrial Trucks: Train the Trainer Certification
- OSHA Competent Person in Scaffolding, Fall Protection, and Excavation and Trench
- Automotive Service Excellence (ASE) Certification No. ASE-6014-8043, Passenger Car/Light Truck, Medium, and Heavy-Duty Truck

- Apprentice Electrician State of Texas License No. 768259
- NFPA 70E
- Smith System Managing DOT Safety & Compliance
- Vibration Institute Vibration Analyst: Category II (ISO 18436-2)
- LyondellBasell 2011 Morris Plant award for LDPE Reactor Internal Corrosion Tube Leak Investigation
- LyondellBasell 2011 Morris Plant award for Open Flare Relief Valve Team
- LyondellBasell 2011 Morris Plant award for Olefins CUI Piping Hot Tap and Stopple Execution
- LyondellBasell 2010 Corporate award for Evaluation and Approval of Aerogel Insulation
- LyondellBasell 2010 Morris Plant award for Evaluation and Approval of Aerogel Insulation
- LyondellBasell 2010 Morris Plant award for Chemical Industry Council of Illinois Presentation
- LyondellBasell 2010 Morris Plant award for Exchanger 207 Tube Leak Emergency Response and Repair
- LyondellBasell 2009 Morris Plant award for Inspection Department Program Improvements
- LyondellBasell 2009 Morris Plant award for Olefins PSA Vessels Fitness for Service
- LyondellBasell 2009 Morris Plant award for Cooling Tower Mechanical Integrity
- LyondellBasell 2009 Morris Plant award for CUI/Maintenance Painting Program Improvements
- LyondellBasell 2008 Worldwide Reliability Forum Presenter OP1/OP2 Cooling Tower Header Repairs
- LyondellBasell 2007 Corporate Award for OP1/OP2 Cooling Tower Header Repairs Preventing Emergency Shutdown
- LyondellBasell 2007 Channelview Plant award for OP1/OP2 Cooling Tower Header Repairs

# **SPECIALIZED TRAINING**

- Intrepid Vehicle Spy (VSpy3) Can Bus Basics, Scripting, and Diagnostics
- Apollo Associated Services Apollo Root Cause Training
- Think Reliability 5-Why Cause Mapping
- Think Reliability Root Cause Training
- ASME Section VIII Div 1 and 2 Pressure Vessel Design
- Exxon Mobil Advanced Fundamentals of Lubrication
- John Crane Mechanical Seal Training
- Pump Training Design, Operations, Maintenance, and Repair
- Advanced Bolted Joint Design
- High Pressure Piping Reliability
- Machinery Component Failure Analysis
- Welding Technology
- Reliability Engineering Training
- Confined Space
- Hazmat
- Hazwopper
- Arc Flash
- Asbestos

# **PUBLICATIONS (Previous 10 Years)**

Numerous Failure Analysis Reports (privileged and confidential)