

CURRICULUM VITAE OF MITCHELL E. DUFFIELD, P.E.

March 2023

I. General Information

A. Position Senior Mechanical Engineer
Semke Forensic
100 North Clayview Drive, Suite B
Liberty, Missouri
Telephone: 816-415-2020

II. Professional Summary

A. Education: Bachelor of Science
Mechanical Engineering
Missouri University of Science & Technology
Rolla, Missouri
2010

B. Experience:

May 2021 to Present

Position: Mechanical Engineer
Semke Forensic
100 North Clayview Drive, Suite B
Liberty, MO

Responsible for mechanical engineering projects with emphasis in vehicular accident reconstruction, failure analysis, and mechanical design analysis.

August 2018 to May 2021

Position: Mechanical Engineer
Argus Consulting
Overland Park, KS

Served as project manager and mechanical engineer for airport fuel expansion and renovation jobs with ignitable liquids where gas safety was a top priority. Managed a team of engineers and sub-consultants to deliver a quality product in accordance with NFPA 407. Led mechanical design for railroad fuel facility overhaul. Performed hydraulic analysis to ensure safe and efficient designs located in intrinsically safe environments. Developed technical specifications, design drawings, and project estimates. Responsible for facility investigations, concept reports, and feasibility studies. Excelled in contract administration and construction relationships.

June 2016 to August 2018

Position: Lead Mechanical Engineer-Procurement
Kiewit Power Engineers
Lenexa, KS

Managed several engineers producing equipment specifications. Responsible for meeting procurement schedule and budget. Served as a last quality check for all mechanical equipment specifications. Awarded contracts to selected vendors after detailed review of their proposals and exceptions. Gave relevant educational presentations to develop support engineers.

May 2014 to June 2016

Position: Mechanical Engineer-Production
Kiewit Power Engineers
Lenexa, KS

Performed calculations to support power plant system and equipment design. Developed engineering drawings including P&IDs and isometrics. Developed equipment specifications. Evaluated manufacturers' proposals for compliance with specifications. Executed contract administration involving vendor submittal review.

January 2011 to May 2014

Position: Mechanical Engineer-Estimating
Kiewit Power Engineers
Lenexa, KS

Served as mechanical lead or support on several different types of projects including natural gas combined cycle power plants, air quality controls system retrofits and micro LNG plants. Responsible for system design and project drawings. Evaluated and signed up for performance guarantees. Presented completed proposals to potential clients.

May 2010 to August 2010

Position: Mechanical Engineer Intern
Kiewit Power Engineers
Lenexa, KS

Provided estimates on many types of jobs including coal, natural gas, and solar power plants. Performed system design calculations and developed project drawings including P&IDs and isometrics. Completed proposal review and comparison to be used in final estimate to client.

May 2009 to December 2009

Position: Mechanical Engineer Co-Op
Kiewit Power Engineers
Overland Park, KS

Developed standard equipment specifications in support of power plant design. Reviewed and approved contractor submittals based on contract specifications. Reviewed and updated engineering drawings including P&IDs and isometrics. Resolved issues in the field through RFIs and coordination with equipment manufacturers.

III. Seminars and Technical Courses Attended

2021 – IPTM Bosch CDR Tool Technician Training
2021 – CSI Bosch CDR Data Analyst Training
2021 – Drone Pilot Ground School Training
2022 – IPTM At-Scene Traffic Crash/Traffic Homicide Investigation
2022 – SAE International Accessing and Interpreting Heavy Vehicle
Event Data Recorders

III. Professional Registration

Registered Professional Engineer in the States of Arkansas, Iowa, Kansas, Missouri, Nebraska, and Oklahoma
FAA Certified Unmanned Aircraft System (UAS) Pilot