

CURRICULUM VITAE OF JEFFREY W. POLSTER, P.E.

April 2025

I. General Information

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

II. Professional Summary

A. Education: Bachelor of Science – Magna Cum Laude
Mechanical Engineering
University of Missouri
St. Louis, Missouri
2006

Certificate of Specialization
Computer-Aided Design and Drafting
St. Louis Community College
Florissant, Missouri
2000

Machine Shop I and II
North County Technical School
Florissant, Missouri
1986

Hazelwood Central High School
St. Louis County, Missouri
1984

B. Experience:

January 2012 to Present

Position: Senior Mechanical Engineer
Semke Forensic
St. Charles, Missouri

Responsible for mechanical engineering investigations including vehicular accident reconstruction, mechanical failure analysis, and fire causation.

September 2006 to January 2012

Position: Mechanical Engineer
Semke Forensic
St. Charles, Missouri

Responsible for mechanical engineering investigations including vehicular accident reconstruction, mechanical failure analysis, and fire causation.

January 2002 to September 2006

Position: Mechanical Designer/Machinist
Universal Packaging Corporation
Kirkwood, Missouri

Responsible for the design, construction and maintenance of production machinery and tooling. Also responsible for the acquisition of materials and tools for the machine shop, plant safety and OSHA compliance, the design, construction, and maintenance of production lines and administration of the company's computer network.

July 1999 to December 2001

Position: Mechanical Designer/Drafter
The Starrco Company
Maryland Heights, Missouri

Responsible for modular office design projects including building layout, building code compliance, HVAC systems and load-bearing structural components. Also responsible for customer technical support and new component development.

October 1997 to April 1999

Position: All-Around Machinist
The Boeing Company
St. Louis, Missouri

Responsible for machining commercial and military aircraft tooling using manual and CNC equipment, including part inspection and process verification for ISO 9000 compliance.

January 1996 to October 1997

Position: Machinist
Universal Packaging Corporation
Kirkwood, Missouri

Responsible for machining parts and tooling using manual equipment, and the maintenance, modification, and repair of production machinery.

November 1993 to January 1996

Position: General Machinist
McDonnell Douglas Corporation
St. Louis, Missouri

Responsible for machining parts and tooling using manual and CNC equipment.

April 1992 to November 1993

Position: CNC Machinist
Van Os Machine Works
Overland, Missouri

Responsible for machining parts and tooling using manual and CNC equipment.

October 1987 to October 1991

Position: General Machinist
McDonnell Douglas Corporation
St. Louis, Missouri

Responsible for machining parts and tooling using manual and CNC equipment.

June 1985 to October 1987

Position: Machinist/Utility Worker
Allied Gear
Overland, Missouri

Responsible for shipping container construction and machining parts using manual equipment.

III. Seminars and Technical Courses Attended

1988 - Ethical Decision Making Seminar
1989 - CNC Programming Course
1990 - Geometric Dimensioning and Tolerancing - ANSI Y14.5 Course
1991 - Statistical Process Control, Concepts Course
1992 - Forklift Operation and Safety Course
1993 - Statistical Process Control, Advanced Course
1995 - Statistical Process Control, Data Entry Software Course
1995 - ISO 9000 Implementation Course
1998 - High Performance Work Organization Course
1998 - ISO 9000 Compliance Course
1999 - ISO 9000 Operator Verification Course
2007 - Gas/Oil Service & Appliance Fire Investigation Course
2007 - Commercial Vehicle Braking Systems - SAE
2007 - IAAI - Illinois Chapter Fire Investigation Conference
2008 - PC-Crash Accident Reconstruction Software Course
2009 - Human Factors in Traffic Accident Reconstruction Course
2009 - Crash Data Retrieval Technician Course
2009 - Crash Data Retrieval Data Analyst Course
2010 - Crash Data Retrieval Users Summit
2010 - Motorcycle Crash Investigation - IATAI Course
2010 - Heavy Truck Electronic Control Module Data Use - IATAI Course
2010 - Heavy Vehicle Event Data Recorders - SAE Course
2011 - SAE World Congress Seminar

2011 - Biomechanics of Injury Causation Seminar
2011 - GPS in Accident Reconstruction Seminar
2011 - Valve Fundamentals Course
2012 - Crash Data Retrieval Users Summit
2012 - Investigation of Gas and Electric Appliance Fires Course
2013 - Crash Data Retrieval Users Summit
2013 - Fire Investigation & Low-Speed Collisions - MAACA/IASIU
2014 - Crash Data Retrieval Users Summit
2014 - Accident Evaluations and Resources & Injury Causation, - MAACA/IASIU
2014 - Machine Safety and Product Liability Seminar - NASP
2015 - Crash Data Retrieval Users Summit
2015 - Vehicle Fire, Arson & Explosion Investigation - NAFI
2016 - Crash Data Retrieval Users Summit
2017 - Event Data Recorder User's Summit
2018 - Event Data Recorder User's Summit
2019 - Event Data Recorder User's Summit
2021 - Tire, Brake, and Suspension/Steering Failures Courses
2021 - Rollover Analysis Course
2021 - Bumper Damage Analysis Course
2021 - Skid to Rest and Skid Mark Analysis Course
2021 - Diesel Engine Fundamentals Course
2023 - Guide to Electric Vehicles Course
2023 - Forensic Engineering Course, Parts 1-5
2023 - Human Factors in Forensic Analysis of Accidents Course
2023 - Drone Technology Course
2023 - Forensic Lighting Analysis Course
2023 - Expert Witness Testimony Course
2023 - GPS: Theory, Practice, and Applications Course
2024 - Event Data Recorder User's Summit

IV. Professional Affiliations

American Society of Mechanical Engineers (ASME)
Society of Automotive Engineers (SAE)

V. Professional Registration

Registered Professional Engineer in the State of Missouri