

Steven J. Roensch
Curriculum Vitae

Current as of June 5, 2024

Executive Summary

- Robust background in Engineering Mechanics, Physics and Mathematics
- 42 years of professional experience analyzing product designs and failures

- Expert Witness on 79 cases
- Testified 23 times
- Defendant and Plaintiff investigations
- Product Liability, Personal Injury, Patent Infringement & Invalidity

- Engineering Consultant on 100's of mechanical designs
- 1000's of engineering analyses

- M.S. in Engineering Mechanics
- B.S. in Applied Mathematics, Engineering and Physics with Honors
- Taught at:
 - University of Wisconsin-Madison
 - Marquette University
 - IBM Research & Development
 - Client locations

- Hands-on engineer
- Maintenance and repairs on own vehicles, boats and aircraft

Steven J. Roensch
Curriculum Vitae (continued)

Current as of June 5, 2024

Work Experience

- Roensch & Associates 1988–present
Fox Crossing, Wisconsin
previously Grafton, Wisconsin
 - President - Expert witness and litigation technical support in the following industries:
 - ✓ Energy
 - ✓ Construction
 - ✓ Industrial
 - ✓ Agricultural
 - ✓ Medical
 - ✓ Transportation
 - ✓ Marine
 - ✓ Utility
 - ✓ Commercial
 - ✓ Residential
 - Failure analysis consulting
 - Patent infringement & invalidity
 - Finite element analysis consulting
 - Marketing and support of finite element software and computer hardware

- IBM Corporation 1982–1991
Milwaukee, Wisconsin
 - Systems Engineer - Finite element analysis consulting
 - Marketing and support of finite element software and computer hardware

Rochester, Minnesota

 - Design Engineer - Disk drive research & development
 - Nonlinear queuing theory analysis

- University of Wisconsin 1981–1982
Madison, Wisconsin
 - Undergraduate Course Instructor

Professional Societies

ASME – American Society of Mechanical Engineers

Steven J. Roensch
Curriculum Vitae (continued)

Current as of June 5, 2024

Education

Master of Science in Engineering Mechanics

May 1982, University of Wisconsin–Madison

Specialized in elasticity and stress analysis

Bachelor of Science in Applied Mathematics, Engineering and Physics with Honors

May 1981, University of Wisconsin–Madison

Phi Beta Kappa, Phi Kappa Phi, Phi Eta Sigma, Graduated with Distinction, Trewartha Honors Undergraduate Research Fund Grant, 1981 Radtke Scholarship—University of Wisconsin Physics Department’s Outstanding Senior, James F. Lincoln Foundation 1981 Engineering Award

Publications

- Consulting Project Reports – Hundreds of confidential reports detailing the analysis of the clients’ products, with recommendations for any necessary changes, 1988–present
- *The Finite Element Method: A Four-Article Series* – Written for American Society of Mechanical Engineers, published in ASME newsletter, 1996
- College Thesis – *Bicubic Spline Interpolation and Application to Two-Dimensional Stress Analysis*, 1981

Teaching Experience

- Marquette University – Guest lecturer on engineering expert witnesses
- FEA Classes – Taught *Finite Element Analysis* theory and practice classes to many customers, including J.I. Case/International Harvester, Johnson Controls, Oshkosh Truck Corporation, Giddings & Lewis, 1988–1996
- IBM Research & Development – Taught *Variational Methods* graduate-level mathematics class, focusing on the foundation of the finite element method, 1986
- University of Wisconsin–Madison – Taught Statics and Strength of Materials engineering classes, 1981–1982

Steven J. Roensch
Litigation Experience

Current as of June 5, 2024

Professional Experience: 42 years
Expert Witness Experience: 29 years
Total Testimony: 23
 Deposition: 18
 Courtroom: 4
 Arbitration: 1
Patent Cases: 9
Total Cases: 79

Steven J. Roensch
Litigation Experience (continued)

Current as of June 5, 2024

| | <u>Date</u> | <u>Industry</u> | <u>Description</u> | <u>Deposition</u> | <u>Courtroom/ Arbitration</u> |
|-----|---------------|-----------------|--|-------------------|-----------------------------------|
| 1. | 1995- 1997 | Utility | Rakes v. Simon-RO – Utility Truck Boom Failure | Yes | Yes |
| 2. | 1997 | Utility | Electrical Insulator Lifter Failure | | |
| 3. | 1998 | Industrial | Toyota Material Handling U.S.A. – Forklift Fatality | | |
| 4. | 1998 | Energy | TU Electric v. F & E Erection – Electric Plant Vessel Failure | | |
| 5. | 1998 | Construction | Simon-Access – Boom Descent Time | | |
| 6. | 1998 | Industrial | Lattimore – Conveyor Lift Accident | | |
| 7. | 1999 | Industrial | Bolin – Forklift/Shipping Container Accident | | |
| 8. | 1999 | Transportation | Fire Truck Accident | | |
| 9. | 1999 | Commercial | Haynes and Giffin v. Bush Hog – Mower Blade Failure | | |
| 10. | 1997- 1999 | Construction | Racine Federated v. Homelite – Concrete Vibrator Engine Failures | Yes | Yes |
| 11. | 2000- 2002 | Energy | Fidelity & Deposit of Md. v. KFX – Coal Processing Plant Fire | Yes | Yes |
| 12. | 1999- 2003 | Energy | Lankford v. Energy Industries – Natural Gas Plant Explosion | Yes | |

Steven J. Roensch
Litigation Experience (continued)

Current as of June 5, 2024

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|-----|---------------|-----------------|---|-------------------|-----------------------------------|
| 13. | 2004 | Industrial | Chain Link Weld Flaw Failure | | |
| 14. | 2004 | Industrial | Toyota Material Handling U.S.A. – Forklift Accident | | |
| 15. | 2004 | Energy | Bridges v. Hydra Rig – Oil Field Equipment Failure | | |
| 16. | 2005 | Industrial | Valero Refinery – Valve Pipe Failure | | |
| 17. | 2004- 2006 | Energy | Jackson v. Phillips – Coal Mining Shuttle Car Canopy Leg Failure | | |
| 18. | 2005- 2006 | Residential | Grasso v. Cuno Inc. – Filtration System Polymeric Line Failure | | |
| 19. | 2007 | Industrial | Electric Motor Cooling Fin Failure | | |
| 20. | 2006- 2007 | Construction | Flippin v. Crocker Crane – Derrick Boom Failure | | |
| 21. | 2006- 2007 | Construction | Obayashi Corporation – Hoover Dam Cableway Tower Collapse | | |
| 22. | 2007 | Commercial | Brunner v. US Chemical – Dispenser Chemical Spill | | |
| 23. | 2007- 2008 | Transportation | Cabell v. Great West Casualty – Flatbed Truck Accident | | |
| 24. | 2008 | Industrial | Robinson v. United Rentals – Forklift Battery Accident | | |

Steven J. Roensch
Litigation Experience (continued)

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|-----|---------------|-----------------|--|-------------------|-----------------------------------|
| 25. | 2008- 2009 | Transportation | Arbella Insurance et al v. Snap-on Inc. – Motorcycle Lift Failure | | |
| 26. | 2008- 2009 | Energy | McDaniel v. Smith International – Oil Field Equipment Failure | Yes | |
| 27. | 2009 | Construction | Enerson v. Volvo Construction Equipment – Excavator Cab Window Support Failure | | |
| 28. | 2009 | Residential | Natural Gas Pipe Joint Failure | | |
| 29. | 2009 | Industrial | Oglebay-Norton / Foseco – Steel Hot-Top Refractory Asbestos | | |
| 30. | 2009- 2010 | Transportation | McNicoll v. Northern Tool – Trailer Wheel Rim Failure | Yes | |
| 31. | 2010 | Energy | Oil Pipeline Stepped Weld Joint | | |
| 32. | 2010 | Industrial | Excel Machinery Conveyor Joint | | |
| 33. | 2007- 2010 | Medical | Sonntag v. Teleflex Inc. dba Pilling – Surgical Tool Failure | | |
| 34. | 2010 | Industrial | Gas Rupture Disc Failure | | |
| 35. | 2011 | Transportation | Bell Helicopter v. Eurocopter – Patent Infringement – Helicopter Landing Gear Assembly | | |
| 36. | 2011 | Construction | Superior Grouting – Water Pipe Buckling Analysis | | |

Steven J. Roensch
Litigation Experience (continued)

Current as of June 5, 2024

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|-----|-------------|-----------------|--|-------------------|-----------------------------------|
| 37. | 2010-2011 | Transportation | Tezanos v. Boss Hoss Cycles – Motorcycle Component Failure | Yes | |
| 38. | 2010-2011 | Residential | Custom Metals v. Motion Industries – Custom Gate Bearing Failure | Yes | Yes |
| 39. | 2011 | Transportation | Webb v. Tyson, et al. – Rear Impact Underride Guard | | |
| 40. | 2011 | Energy | Oil Well Drillpipe Failure Dynamic Analysis | | |
| 41. | 2011 | Residential | Gas Explosion Dwelling Analysis | | |
| 42. | 2012 | Marine | River Barge Pelican Hook Failure Analysis | | |
| 43. | 2012 | Industrial | Hernandez v. Freeport Welding – Quench Chamber Tip-over Analysis | | |
| 44. | 2012 | Energy | Aries Well v. Hanover Insurance – Oil Well Workover Rig Collapse | Yes | |
| 45. | 2012-2013 | Commercial | Shopping Mall Escalator Combplate Analysis | | |
| 46. | 2013 | Industrial | Harkins v. OWT Industries – Generator Wheel Rim Failure | Yes | |
| 47. | 2013 | Commercial | Deere v. Duroc et al. – Mower Deck Patent Infringement | | |
| 48. | 2013-2014 | Transportation | Locomotive Radio Compartment Load Analysis | | |

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Litigation Experience (continued)

Current as of June 5, 2024

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|-----|-------------|-----------------|--|-------------------|-----------------------------------|
| 49. | 2013-2014 | Construction | Star Alpha Corp. v. Mack Canada – Dump Truck Suspension Failures | | |
| 50. | 2013-2014 | Transportation | McDonald v. Toyota – SUV Drive Shaft Failure | Yes x 2 | |
| 51. | 2014 | Commercial | Vehicle Material Spreader – Patent Infringement – Vibrational Dynamics Testing | | |
| 52. | 2014 | Transportation | Turner v. Dutchmen – Travel Trailer Frame Failure | | |
| 53. | 2014 | Commercial | Hoffman v. Dorel dba Cosco – Hand Truck Wheel Rim Failure | Yes | |
| 54. | 2014 | Energy | Enterprise Crude Oil v. Jensen – Oil Tank Mixer Hinge/Valve Failure | | |
| 55. | 2014-2015 | Industrial | Rockydale Quarries v. Vulcan Aggregates – Rock Crusher Failure | | |
| 56. | 2015 | Commercial | Elliott v. Tractor Supply Company – Split Rim Wheel Failure | Yes | |
| 57. | 2015-2016 | Commercial | Evans v. Stihl Inc. – Chain Saw Fuel Tank Geysering – Patent Related | | |
| 58. | 2015-2017 | Commercial | Chair Gas Spring Failure – Patent Related | | |
| 59. | 2016-2017 | Energy | Chesapeake v. WDI Manufacturing, LLC – Oil Field Equipment Failure | | |
| 60. | 2017 | Construction | Kennedy Concrete v. Garden State Engine, et al. – Truck Trolley Boom Failure | | |

Steven J. Roensch
Litigation Experience (continued)

Current as of June 5, 2024

| | <u>Date</u> | <u>Industry</u> | <u>Description</u> | <u>Deposition</u> | <u>Courtroom/ Arbitration</u> |
|-----|-------------|-----------------|---|-------------------|-----------------------------------|
| 61. | 2017 | Energy | Oilfield Salt Water Disposal Well Pipe Victaulic Coupling Failure | | |
| 62. | 2018 | Commercial | Impact Analysis due to Overhead Light Support Failure | | |
| 63. | 2018 | Energy | Oilfield Casing Coupling Failure | | |
| 64. | 2016-2018 | Transportation | All-Terrain Vehicle (ATV) Design – Patent Infringement | | |
| 65. | 2018-2019 | Construction | Step Ladder Injury | | |
| 66. | 2018-2019 | Commercial | Walz v. Doug's Midwest Aerial Service LLC – Aerial Lift Failure | | |
| 67. | 2019 | Residential | Pawlik v. Alco Manufacturing Co. – Tree Stand Ratchet Strap Failure | | |
| 68. | 2019-2020 | Industrial | Brush Cutter Design – Patent Infringement | | |
| 69. | 2019-2022 | Residential | Climbing Stick Failure | Yes | |
| 70. | 2019-2022 | Commercial | Heat Exchanger Failure | Yes | |
| 71. | 2022-2024 | Industrial | Allied v. Smash My Trash – Roll-off Waste Containers | Yes | Yes |
| 72. | 2022 | Agricultural | Tractor Loader Accident | | |

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Litigation Experience (continued)

Current as of June 5, 2024

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|-----|---------------|-----------------|--|-------------------|-----------------------------------|
| 73. | 2022 | Commercial | Restaurant Fire | | |
| 74. | 2023- 2024 | Transportation | Recreational Off-Highway Vehicle (ROV) / Utility Task Vehicle (UTV) Accident | | |
| 75. | 2023- 2024 | Agricultural | Silage Bagger Accident | | |
| 76. | 2023- 2024 | Transportation | Recreational Off-Highway Vehicle (ROV) / Utility Task Vehicle (UTV) Accident | | |
| 77. | 2024 | Transportation | Portable Bollard Barrier Design – Patent Infringement | Yes | |
| 78. | 2024 | Medical | Ambulance Cots and Fasteners – Patent Infringement | | |
| 79. | 2024 | Industrial | Fire Protection Sprinkler System OS&Y Gate Valve Failure | | |

Steven J. Roensch
Expert Testimony List

Current as of June 5, 2024

Professional Experience: 42 years
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 Deposition: 18
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Patent Cases: 9
Total Cases: 79

Cases in which Steven J. Roensch testified as an expert at trial or by deposition:

23. Meridian Rapid Defense Group LLC v. Delta Scientific Corporation
Case No.: 2:23-cv-07222
United States District Court for the Central District of California
March 18, 2024 – Testimony by deposition
22. Allied Services, LLC v. Smash My Trash, LLC, et al.
Case No. 4:21-cv-00249
United States District Court for the Western District of Missouri
August 25, 2022 – Testimony by deposition
21. February 28, 2024 – Testimony at trial
20. The Shyft Group USA, Inc., f/k/a Spartan Motors USA, Inc.,
v. API Heat Transfer Thermasys Corporation
Case No. 1:18-cv-00797-RJJ-RSK
United States District Court
for the Western District of Michigan Southern Division
March 7, 2022 – Testimony by deposition
19. Moreland, et ux. v. The Sportsman's Guide, Inc.
Case No. 1:17-cv-01034-LJV-JJM
United States District Court for the Western District of New York
November 8, 2021 – Testimony by deposition
18. Elliott v. Tractor Supply Company
Civil Action No. 14-C-80
Circuit Court of Brooke County, West Virginia
September 15, 2015 – Testimony by deposition

Steven J. Roensch
Expert Testimony List (continued)

Current as of June 5, 2024

17. Hoffman v. Dorel dba Cosco
Case No. 14-CV-21229-HUCK/OTAZO-REYES
United States District Court for the Southern District of Florida
October 21, 2014 – Testimony by deposition
16. McDonald v. Toyota
Civil Action No. 1:13-cv-00704-RM-KMT
United States District Court for the District of Colorado
February 20, 2014 – Testimony by deposition
15. April 23, 2014 – Testimony by deposition
14. Harkins v. OWT Industries, Inc.
Case No. 5:12-CV-00065-TBR
United States District Court
for the Western District of Kentucky at Paducah
May 6, 2013 – Testimony by deposition
13. Aries Well Service, Inc. v. The Hanover Insurance Company
Case No. 7:12-CV-00006 RAJ
United States District Court
for the Western District of Texas, Midland-Odessa Division
October 3, 2012 – Testimony by deposition
12. Custom Metals v. Motion Industries, et al.
Case No. 08CV3421
Circuit Court of Dane County, State of Wisconsin
July 29, 2010 – Testimony by deposition
11. February 4, 2011 – Testimony at trial
10. Tezanos v. Boss Hoss Cycles
Civil Action No. 3:09-cv-0284
United States District Court
for the Southern District of Texas, Galveston Division
December 1, 2010 – Testimony by deposition
9. McNicoll v. Northern Tool & Equipment, et al.
No. Civ. 08-00883 JC/LAM
United States District Court for the District of New Mexico
November 19, 2009 – Testimony by deposition

Steven J. Roensch
Expert Testimony List (continued)

Current as of June 5, 2024

- McDaniel v. Smith International, et al.
 - Cause No. 2007-75537
 - District Court
 - 61st Judicial District, Harris County, Texas
- 8. April 21, 2009 – Testimony by deposition

- Lankford v. Energy Industries
- 7. 2009 – Testimony by deposition

- Fidelity & Deposit of Md. v. KFX
- 6. 2009 – Testimony by deposition
- 5. 2009 – Testimony at trial

- Racine Federated v. Homelite
- 4. January 18, 1999 – Testimony by deposition
- 3. October 20, 1999 – Testimony at arbitration

- Rakes v. Simon-RO
- 2. 1996 – Testimony by deposition
- 1. 1997 – Testimony at trial

Steven J. Roensch
Representative Consulting Projects

Current as of June 5, 2024

| | |
|-------------------------------------|------------------------------------|
| Space Station Components | Grain & Semi Trailers |
| Wind Turbines | Motorcycle Components |
| Aircraft Engine Pistons | Agricultural Vehicles |
| Aircraft Engine Cylinders | Earth Moving Equipment |
| Aircraft Engine Crankshafts | Industrial Forklifts |
| Airliner Components | Rough Terrain Forklifts |
| Airliner Manufacturing Equipment | Rock Crushers |
| Marine Outboard Crankshafts | Jaw Crushers |
| Marine Outboard Cowlings & Castings | Cone Crushers |
| Marine Inboard Manifolds | Vibrating Gravel Screens |
| River Barge Equipment | Gravel Conveyors |
| Steel Bollard Barriers | Transmission Housings |
| Concrete Blast Walls | Transmission Gears |
| Industrial Robots | Cranes |
| Robot Gantries | Chain Links |
| Oil Field Equipment | Man Lifts |
| Fuel Plant Piping | Escalators |
| Hydraulic Motors | Medical Diagnostic Equipment |
| Electric Motors | Medical Beds and Lifts |
| High-Speed Motor Winding Equipment | Athletic Braces |
| Boiler Components | Computer Disk Drive Components |
| Generator Enclosures | HVAC Manifolds |
| Automotive Battery Housings | Pneumatic Cartridges |
| Automotive Door Assemblies | Foundry Ovens |
| Automotive Drive Components | Food Processing Equipment |
| Automotive Mirror Housings | Cooking Platens |
| Automotive Radiators | High-Precision Machining Equipment |
| Automotive Seating | Concrete Vibrators |
| Automotive Steering Components | Plumbing Products |
| Crash & Rescue Vehicles | Commercial Windows |
| Recreational Vehicles | Distiller Housings |
| Commercial Trucks | Plastic Gears |
| Truck Racks | |

Steven J. Roensch
Representative Consulting Clients

Current as of June 5, 2024

| | |
|-----------------------------------|-----------------------------------|
| ABB Robotics | Joerns Healthcare |
| Abrams Airborne | Johnson Controls |
| Advanced Machine & Tool | Kohler Engines |
| Allen-Bradley | Kohler Plumbing |
| Bartell Machinery Systems | Lippmann |
| Bison Engineering | Magnetrol |
| Boeing | Maynard Steel Casting |
| Brooks Stevens Design | McCloskey International |
| DeltaHawk Engines | Mercury Marine |
| Dynamic Fan Corporation | Metso Minerals |
| Eaton Corporation | Milwaukee Metal Products |
| Erie Manufacturing | Modine |
| Falk Corporation | Nordberg/Metso Minerals |
| Flanders Electric | Oshkosh Truck |
| G.E. Medical Systems | Osmonics Autotrol |
| Georgia-Pacific/Fort James | Rexnord |
| Giddings & Lewis | Rockwell Automation/Allen-Bradley |
| Harley-Davidson | Simon Aerials |
| Hewlett-Packard | Strattec Security Corporation |
| Hoyer Lifts/Sunrise Medical | Terex Cranes |
| IBM Corporation | Toyota |
| In-Sink-Erator | Trak International |
| J.E.I. Metallurgical | Wyco Tool |
| J.I. Case/International Harvester | Zond Energy Systems |