



## **JASON D. STIGGE, P.E. SENIOR CONSULTANT**

[jdstigge@engsys.com](mailto:jdstigge@engsys.com)

Jason D. Stigge is a Licensed Professional Mechanical Engineer (P.E.) and a Senior Consultant with Engineering Systems Inc. (ESi).

Following six years of U.S. Navy nuclear propulsion service, Mr. Stigge earned a Bachelor of Science in Mechanical Engineering at the University of Nebraska.

Mr. Stigge routinely works within the industrial, insurance, and legal industries. He has provided trial and deposition testimony on numerous occasions.

Mr. Stigge has over 20 years of broad experience in mechanical, hydraulic, and pneumatic systems, including design, operations, maintenance, and repair, and more than ten years of experience conducting complex failure investigations. His experience includes engineering investigations and reconstructions of automobile & truck accidents, including extraction & analysis of vehicle event data recorders (EDR), heavy truck & agricultural engine failures, industrial machinery & heavy equipment failures, and accidents related to industrial trucks, man lifts, earth moving equipment, elevators, cranes, pipeline failure evaluations, manufacturing & processing equipment, such as material handling equipment, conveyors, valves, pumps, compressors, turbines, steam boilers, heat exchangers, tanks, filters, flanges, gasketed joints, wind turbine gear boxes, gas turbine components, and instrumentation and control systems. Additionally, Mr. Stigge has experience in intellectual property (IP) disputes and has provided analyses & testimony on invalidity & infringement.

At ESI's Omaha location, Mr. Stigge performs low speed automotive stiffness characterization testing, which recreates vehicle collision damages to estimate the dynamic conditions and results of low-speed automotive collisions.

Mr. Stigge has vast experience with scene, vehicle, equipment & building inspections, photo documentation, evidence collection, generation of computer-aided models, and analysis of data & file material, as well as fixture design, component & materials testing, and laboratory analyses & procedures including optical microscopy, metallography, and scanning electron microscopy (SEM).

### **Areas of Specialization**

Vehicle Testing	Data Acquisition, Instrumented Testing and Analyses
Industrial Machinery Failures and Accident Analysis	3-Dimensional FARO Focus Laser Scanning
Mechanical Systems	3-Dimensional Printing
Process Equipment and Systems	Mechanical Engineering
Hydraulic and Pneumatic Systems	Biomedical Devices
3-Dimensional Solid Modeling and Fabrication	Intellectual Property Matters
Automotive Accident Investigation and Reconstruction	Transport
Vehicle CDR/EDR Imaging and Evaluation	Safety and Maintenance
Fixture Design and Fabrication	Operation and Maintainability
Laboratory and Industrial Testing	Repairability



## **Education**

B.S. Mechanical Engineering, University of Nebraska-Lincoln, 2012

## **Licensed Professional Engineer (P.E.)**

State of Nebraska License No. E-16927

## **Professional Affiliations/Honors**

### **Society of Automotive Engineers (SAE)**

Member

### **American Society of Mechanical Engineers (ASME)**

Member

## **Positions Held**

### **Engineering Systems Inc., Omaha, Nebraska**

Senior Consultant, 2019 - present  
Senior Staff Consultant, 2017 - 2018  
Staff Consultant, 2012 - 2017  
Technician, 2011 - 2012

### **Drake-Williams Steel, Omaha, Nebraska**

Electrical Mechanical Technician, 2006 - 2010

### **United States Navy – USS Michigan, SSGN 727, Bangor, Washington**

Nuclear Machinist Mate First Class (Submarines) – Engineering Laboratory Technician and Engine Room Supervisor, 2000 – 2006

## **Continued Education**

Aerial Boom and Scissor Lift Operator Certification  
Sunbelt Rentals, 2016

Traffic Crash Reconstruction -1  
Northwestern University – Center for Public Safety, 2015

Crash Data Retrieval Technician Level 1  
Collision Safety Institute, 2014

Air and Foundation Brake Training  
Bendix Brake Training School, 2014

Fundamentals of Engineering Exam - 2012

United States Navy Nuclear Prototype and Water Chemistry Schools  
Ballston Spa, New York, 2001 - 2002

United States Navy Machinist Mate "A" and Nuclear Power Schools  
Charleston, South Carolina, 2001

### **Selected Project Experience**

Condensate system corrosion which led to a steam leak and electrical fire

Hydraulic excavator design and operation when unexpected movement led to a fatality

Hydraulic excavator bucket coupler which dropped a bucket, injuring an employee

Mechanical failures of aerial boom lifts and scissor access platforms

Agricultural equipment failures, including drivelines and PTOs, and tub grinder fires

Food processing plant equipment failures which led to metal debris contamination

Commercial mixer failures, and assisted in a remedial seal design

Bearing damage to turbines during over-sea and over-road transportation

Gear and bearing damage within wind turbine gear boxes

Commercial and agricultural engine failures following repairs or rebuilding

Low-speed auto accident collision damage reconstructive tests

Automotive collisions and performed ACM data collection

Commercial truck collisions and performed ECM data collection

Collisions involving agricultural equipment

Various medical device investigations

On and offshore pipeline failures, as well as related operational data analyses