

STEPHEN G. MARKLEY

EDUCATION

- 2002 Behrend College of Penn State University Erie, PA
Bachelor of Science, Mechanical Engineering Technology
- 2005 University of Tennessee Knoxville, TN
Black Belt, Lean Manufacturing and Six-Sigma
- 2012; 2015 Caldwell Community College Hudson, NC
Motorcycle Safety Foundation Rider Coach Certification
- 2014 North Carolina Justice Academy Raleigh, NC
Motorcycle Crash Investigation
- 2015 North Carolina Justice Academy Edneyville, NC
Investigation and Analysis of Tire Failures

PROFESSIONAL EXPERIENCE

- October 2012 to Present MK & Associates, LLC
Consulting Mechanical Engineer
Provides investigation, analysis and litigation services in the fields of mechanical systems and equipment, vehicular accidents, equipment and failure analysis, motorcycle accident reconstruction and motorcycle stability. Provides investigation of defects in design, manufacture and usage of mechanical products, both industrial and vehicular.
- October 2012 to Present Gaston College
Adjunct Instructor
Teach the Basic and Experienced Motorcycle Rider Courses with materials provided by the Motorcycle Safety Foundation.
- 2011 to Present Trelleborg Industrial Products USA, Inc.
Key Account Manager
Manage major OEM Accounts and develop new business within target markets. Responsible for technical sales and marketing of components that control Noise, Shock and Vibration in the Off-Highway, Marine, Rail and General Industrial markets. Manage concurrent projects including benchmarking, prototyping, durability testing and the production launch of new products.

2010 to 2011

Husqvarna Outdoor Products, North America

Project Engineer

Project Module lead for the implementation of new Powertrain, Drivetrain, Electric Start and Blade Brake Clutch Modules used in multiple variants of self-propelled walk-behind lawnmowers. Coordinate with internal R&D team and supply chain to develop Module design guidelines and acceptable pass/fail criteria for life cycle testing. Managed internal and external suppliers in the development and design of highly stylized engine shrouds.

2007 to 2010

Indian Motorcycle Company

Chassis Design Engineer

Responsible for the specification, design, documentation and integration of chassis and powertrain component parts and systems for several model variants of the MY2009 thru 2011 Indian Chief Motorcycle. Projects included Foot Controls, Hand Controls, Front and Rear Suspension, Belt Guard, Frame and Swingarm, DOT approved Wire and Billet Wheels, NHTSA approved Brake System, Rear Caliper Hanger, Highway Bar, Front Caliper Covers, EPA compliant Exhaust System and the specification of Black and White Wall tires. Develop short and long term corrective action plans for supplier quality concerns. Oversee the assembly of prototype vehicle builds, vehicle concept mock-up's and vehicle pre-production builds. Develop test plans for data acquisition and resolution of durability test concerns. Review and approve supplier deviation requests. Coordinate with internal Quality and Manufacturing teams to develop incoming part inspection processes, gauges, fixtures and jigs. Support public marketing initiatives as required.

1997 to 2003; 2006 to 2007

Lord Corporation

Sr. Design Engineer (2006 to 2007)

Principal Engineering liaison between the global Value Stream and Operations teams. Responsible for identifying and implementing complexity reduction programs for legacy products and LCC resourcing of strategic parts.

Applications/Design Engineer (1997 to 2003)

New product design specific to the application of Noise, Shock and Vibration isolation products. Applications included Off-Highway, Automotive, Rail, Truck and Bus, Recreational Marine, Powersports and Industrial markets. Perform field testing and data acquisition for the specification and validation of vibration isolation mounts and isolation systems. Use proprietary software to perform multi-body 6-Degree of Freedom vibration analysis. Specify laboratory test criteria for mount characterization, benchmarking and fatigue testing and correlated analytical results with that obtained from field testing.

2003 to 2005

VOLVO Construction Equipment, Inc.

Sr. Designer - Vibratory Soil Compaction Team (2003 to 2004)

New product development for the 840 and 540 series Vibratory Soil Compactors. Redesigned the 840 Series operator cabin for enhanced operator comfort, increased part commonality between machine variants, DFM and DFA. Designed a new fiberglass hood enclosure and ancillary hardware for a new 540 series soil compactor. Worked with multiple suppliers to specify vibration isolation systems for the engine, operator cabin and vibratory drum suspensions.

Sr. Designer - Skid Steer Loader (2004 to 2005)

Designed functional improvements for the A-Series mechanical foot control system, design of new hydraulic hard-lines for work tool attachments, hydraulic fitting specifications and the specification of engine and ROPS compliant operator cabin vibration isolation systems. Completed and passed certification for Lean Manufacturing and Six-Sigma training by extension of the University of Tennessee.

1990 to 1994 United States Navy, Aviation Ordnanceman (EAWS)
VF-1 Wolfpack, Rank E-4 (1990 to 1992)

F-14A Aircraft Ordnance team member. Participated in Operations Southern Watch and Restore Hope while deployed onboard the Aircraft Carrier U.S.S. Ranger CV-61. Supervised and performed preventative maintenance programs on F-14-A Aircraft Armament Systems. Participated in routine ordnance training programs and certification courses to maintain ordnance team member certification. Distinguished member of the Carrier Air Group Arm/De-Arm Team.

USS Kitty Hawk CV-63, Rank E-5 (1992 to 1994)

Supervised ordnance handling personnel during ordnance assembly, disassembly and inspection. Helped coordinate CONREP and VERTREP ordnance handling and loading evolutions. Earned distinction as an Enlisted Aviation Warfare Specialist. Received an Honorable Discharge from active duty Naval Service.

SKILLS AND CERTIFICATIONS

MSF - Rider Coach: National Certification No. 159484

COMPUTER APPLICATIONS

CAD: Pro/Engineer Wildfire, Auto-Cad Inventor, Solid Edge, Solid Works, Catia

Analytical: Harmony, Ansys, Ansys, Pro-Mechanica Design Space, Mini-Tab, Weibull, Microsoft Excel

PROFESSIONAL MEMBERSHIPS

American Society of Mechanical Engineers

Society of Automotive Engineers

American Motorcyclist Association

The American Legion: Post No. 773

Knights of Columbus: Council No. 14475