Andrew K. Schmit, PE

Assistant Technical Director - Electrical/Mechanical

PROFILE

Mr. Andrew Schmit, Assistant Technical Director of the Electrical/Mechanical group, came to Envista in 2014 with a Bachelor's and a Master's degree in Mechanical Engineering from Texas Tech University. During graduate school, he focused his studies on the field of failure analysis and forensic engineering and provided consulting services to various clients seeking litigation or subrogation support. He also has experience evaluating mechanical equipment post-loss to determine the extent of damage and scope of repairs, as well as conducting materials analyses to determine the origin and root cause of component failures. At Envista, Mr. Schmit has become experienced in providing analysis of mechanical failures involving property loss, personal injury, and product liability. Key strengths include the following:

- Material Analysis
- Product Liability
- Fractography
- Equipment Restoration
- Corrosion Failures
- Guarding
- Labels and Warning
- Manufacturing Equipment
- Stamping Presses
- HVAC and Plumbing
- Sporting Equipment
- Agricultural Machinery
- Heavy Equipment
- Hydraulic Systems

OFFICE
845 Claycraft Road
Suite H
Columbus, OH 43230

CONTACT
Office: +1 614 484 0333
Cell: +1 614 400 0625
Fax: +1 866 914 7561
andrew.schmit@envistaforensics.com

CORPORATE OFFICE
5565 Glenridge Connector
Suite 900
Atlanta, GA 30342

WEBSITE
www.envistaforensics.com

EDUCATION

Master of Science, Mechanical Engineering, 2014
Texas Tech University – Lubbock, TX

Bachelor of Science, Mechanical Engineering, 2012
Texas Tech University – Lubbock, TX

LICENSES

Professional Engineer (PE):

- Colorado
- Illinois
- Indiana
- Iowa
- Kentucky
- Michigan
- North Carolina
- Ohio
- Pennsylvania

CONTINUING EDUCATION

- Practical Fractography – ASM International
- Elements of Metallurgy – ASM International
- Metallographic Techniques – ASM International

PROFESSIONAL BACKGROUND

February 2022 – Present: Envista Forensics – Columbus, OH
Assistant Technical Director – Electrical/Mechanical

January 2020 – February 2022: Envista Forensics – Columbus, OH
Senior Project Engineer

January 2018 – January 2020: Envista Forensics – Columbus, OH
Project Engineer

June 2014 – December 2017: Envista Forensics – Columbus, OH
Technical Consultant

October 2012 – May 2014: Real World Forensic Engineering – Lubbock, TX
Technical Consultant

REPRESENTATIVE PROJECT EXPERIENCE

Water Supply Line Failure Analysis
Evaluation of fractured HVAC water supply line in downtown high-rise building

- Inspected the fracture of a water supply line used to carry high-pressure water into a heat pump on an upper floor. It was determined that an installation error had put the supply line into a state of constant stress, eventually resulting in a catastrophic failure.

Gear Tooth Failure Analysis
Material analysis of a fractured gear tooth from a piece of manufacturing equipment

- Assisted in determining the extent of damage to a mechanical stamping press after a gear tooth fractured within the crown. After analysis of the fracture surface, it was determined the gear had failed due to tooth-bending fatigue.

Hydraulic Hose Rupture Resulting in Machine Operator Injuries
Failure analysis of a hydraulic hose in heavy machinery

- Reviewed the failure of a hydraulic hose which ruptured due to elevated hydraulic fluid temperatures. In addition to determining the root cause of failure related to a problem with the cooling system, it was also determined that the machine had been designed and constructed with insufficient guarding which would have prevented injury to the operator had it been in place.

Fort McMurray, AB Wildfires
Evaluation of industrial and commercial equipment to determine extent of soot contamination

- Analyzed soot contamination levels in various types of equipment in industrial and commercial settings to determine the effects of the wildfires on equipment longevity. Also provided guidance for the scope of decontamination needed to restore the equipment to pre-loss condition.

PRESENTATIONS/GUEST LECTURE APPEARANCES

“Forensic Engineering in Industry”, Texas Tech University. September 6, 2019