### RICHARD L. ELLSWORTH, P.E.



Engineering Design & Testing Corp. 8405 Melrose Drive | Lenexa, Kansas 66214

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**ENGINEER: MECHANICAL** 

### **EDUCATION**

1993 Bachelor of Engineering, Mechanical Engineering

University of Missouri-Columbia

#### **EXPERIENCE**

October 2006 to Present

Engineering Design & Testing Corp. Overland Park, Kansas

Consulting Engineer

Analysis of mechanical equipment design, equipment specification and material selection; investigation and analysis of mechanical fractures/failures of materials and components; assessment of fire damage related to mechanical equipment; assessment of fire protection system; assessment of vehicle damage related to hail; mechanical evaluation of vehicle systems; preparation of repair/replace cost estimates.

March 2005 to October 2006 ThyssenKrupp Access Grandview, Missouri

Project Engineer

Design and testing of vertical platform lifts for the commercial and residential fields. Research and Development of lift designs, code evaluation, cost reduction, project tracking, document archiving, and finite element analysis (FEA) of components.

May 2001 to February 2005 **Huhtamaki-America International** 

De Soto, Kansas

Project Engineer

Design, testing and installation of automated food packaging equipment for commercial plants worldwide; including automated equipment design and testing, project tracking, document archiving, finite element analysis (FEA), and drawing approval.

August 1997 to May 2001 Snorkel International Elwood, Kansas

Project Engineer

Design and testing of electrical/hydraulic aerial work platforms for the construction environment. Design and testing of scissor lifts, stick booms and articulated booms. Also involved in project tracking, cost reduction, electrical/hydraulic component selection, design approval, document archiving, and overseeing design personnel.

January 1997 to August 1997 **Engine Master** 

Kansas City, Missouri/ Dallas, Texas

Design Engineer

Installation, setup, running and tooling design of a MASCO 8-axis machining center. Troubleshooting of hydraulic, cooling, electrical, and PLC systems.

July 1995 Interconnect Devices, Inc. to December 1996 *Kansas City, Kansas* 

Design Engineer

Design and management of production prototypes, "first run," and detailed assemblies

with labor estimations.

September 1994 to July 1995

**Acoustics Development Corp.** 

St. Joseph, Missouri

Design Engineer

Design and manufacturing of KIOSK and ATM enclosures.

## **REGISTRATIONS and CERTIFICATIONS**

Registered Professional Engineer in Arkansas #13596

Registered Professional Engineer in California #37859

Registered Professional Engineer in Colorado #44764

Registered Professional Engineer in Illinois #62.062005

Registered Professional Engineer in Indiana #1110096

Registered Professional Engineer in Iowa #18749

Registered Professional Engineer in Kansas #19239

Registered Professional Engineer in Louisiana #36915

Registered Professional Engineer in Michigan #6201055962

Registered Professional Engineer in Minnesota #48071

Registered Professional Engineer in Missouri # E-2002016650

Registered Professional Engineer in Nebraska # E-12172

Registered Professional Engineer in Ohio #78348

Registered Professional Engineer in Oklahoma #22722

Registered Professional Engineer in South Dakota #12102

Commercial Driver's License (CDL-A) - State of Kansas

National Association of Fire Investigators (#14584-7458)

National Council of Examiners for Engineering and Surveying (#30440)

Unmanned Aircraft System (UAS) - Remote Pilot Certification (#4007678)

### **PROFESSIONAL ORGANIZATIONS**

American Society for Metals (ASM International)

American Society of Mechanical Engineers (ASME)

National Association of Fire Investigators (NAFI)

National Council of Examiners for Engineering and Surveying (NCEES)

National Fire Protection Association (NFPA)

National Society of Professional Engineers (NSPE)

Society of Automotive Engineers International (SAE International) International Association of Arson Investigators, Inc. (IAAI)

# **CONTINUING EDUCATION**

2023 International Association of Arson Investigators (IAAI):

Motor Vehicles: The Engine and the Ignition, Electrical, and Fuel Systems; Self Study Course, Lenexa, Kansas

Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems; Self Study Course, Lenexa, Kansas

Basic Electricity; Self Study Course, Lenexa, Kansas

Investigating Motor Vehicle Fires; Self Study Course, Lenexa, Kansas

Motor Vehicle Fire Investigation - 3 Day, Olathe, Kansas

- 2016 ISFI Symposium; National Association of Fire Investigators, Scottsdale, Arizona
- 2015 Ground Source Heat Pump Inspector Training; International Ground Source Heat Pump Association, Kansas City, Missouri
- 2012 International Symposium on Fire Investigation Science and Technology; University of Cincinnati, College Park, Maryland
- 2009 National Fire, Arson & Explosion Investigation Training Program; National Association of Fire Investigators, Denver, Colorado
- 2008 Fire Sprinkler Inspection Training & Certificates Program; Oklahoma State University, Stillwater, Oklahoma

International Symposium on Fire Investigation Science and Technology; University of Cincinnati, Cincinnati, Ohio

- 2007 Bendix Air Brake Training; City of Irving Fleet Maintenance, Irving, Texas

  Metallurgy for the Non-Metallurgist, ASM International Self Study Course, Lenexa, Kansas

  Principles of Failure Analysis; ASM International Self Study Course, Lenexa, Kansas
- 2006 OSHA Lock Out/Tag Out, ThyssenKrupp Access, Grandview, Missouri
- 2005 ADAAG, ASME-A17.1 and ASME-A18.1; ThyssenKrupp Access, Grandview, Missouri
  ANSYS Training; DRD Technology Corp., Tulsa, Missouri
  OSHA Health and Safety Training; ThyssenKrupp Access, Grandview, Missouri
  Storm Water Pollution Prevention; ThyssenKrupp Access, Grandview, Missouri

### **PUBLICATION**

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