

# SCOTT LEWIS, BSME, PE

Mechanical Engineering

Mr. Lewis is a Mechanical Engineering Consultant for Western Engineering & Research Corporation. He has over 22 years experience in the analysis and design of mechanical, electrical and hydraulic systems for mobile equipment applications including on highway vehicles, underground mining equipment and airport snow removal equipment. He has experience designing for custom manufacturing firms as well as high production manufacturing applications. Mr. Lewis has failure analysis and accident investigation experience and provides expert testimony in matters involved in litigation.

## WORK HISTORY

Mechanical Engineering Consultant, Western Engineering & Research Corporation, 2009 to present

Principle Engineer, President, Creative Engineering Design Solutions, LLC, 2006-2009

Senior Design Engineer, IMI-Norgren, 2003-2006

Senior Design Engineer, Chart Industries, 2001-2002

Engineering Manager, Stewart & Stevenson Power Systems Division, 1996-2001

Engineering Manager, Mining Technologies International, 1995-1996

Senior Engineer, John Clark, Inc., 1990-1995

Design Engineer, John Clark, Inc., 1987-1990

## MECHANICAL DESIGN, INVESTIGATION, ANALYSIS & ACCIDENT RECONSTRUCTION

Project design experience includes structural, mechanical, powertrain, hydraulic, pneumatic, and electrical systems. Structural design and evaluation work includes rollover protection structures, steel and aluminum weldments that required extensive engineering analysis including the finite element and natural frequency analysis of an 8,600 gallon cryogenic pressure vessel. Mechanical experience includes the design of a variety of quick-connect loader attachments, wheelchair lifts for buses and rail cars, ergonomic operator interfaces and cab designs. Responsible for the entire structural, mechanical, powertrain, hydraulic and electrical system design of several complete vehicles including an underground loader and an airport maintenance vehicle. The 36,000 pound capacity, radio controlled loader utilized a unique, patented, double articulation system that was the first of its kind.

Mr. Lewis is experienced in accident investigation, both on and off road. He has conducted extensive failure analysis of components in vehicles and other mobile equipment. He is skilled in the design and troubleshooting of both electrical and hydraulic systems on mobile equipment. He has extensive manufacturing experience and involvement in a variety of manufacturing processes including foundries, heat treating, stress relieving, welding, and machining. He is skilled in failure mode and effect analysis, root cause analysis, design of experiments and other methodologies associated with Six Sigma business management strategy.



## Practice Areas

- Mechanical Engineering
- Mobile Equipment
- Accident Reconstruction

## Contact Information

*scott@werc.com*  
303-757-4000

## Credentials

- Licensed Professional Engineer in Colorado
- BS, Mechanical Engineering, Colorado School of Mines
- Numerous classes and seminars on Shock and Vibration Analysis, Finite Element Analysis, Analysis of the Bolted Joint, Cryogenic Engineering, Electronic Servo Control Systems, PLC Programming, Hydraulic System Design, and various Engineering Management courses

## AFFILIATIONS

- American Society of Mechanical Engineers
- National Society of Professional Engineers
- Society of Automotive Engineers