



SCOTT LEWIS, BSME, PE

Practice Areas: Mechanical,
Mobile Equipment
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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 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 experience and provides expert testimony in matters involved in litigation.

LICENSURE & EDUCATION

Licensed Professional Engineer in the State of Colorado

BS Mechanical Engineering, Colorado School of Mines

Mr. Lewis has also completed 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.

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 & FAILURE ANALYSIS

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 the failure analysis of components in underground mining machinery and the mobile equipment industry. 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.

AFFILIATIONS

Mr. Lewis is a member of the American Society of Mechanical Engineers, the National Society of Professional Engineers and has been an active member of the Society of Automotive Engineers.