

Education

Bachelor of Science in Mechanical Engineering

General Motors Institute, 1964

Continuing Education courses in Engineering Management, Crane Safety, Non-Destructive Testing, OSHA/Environment Regulations, Product Liability and Human Factors in Design.

Professional Associations

American Society of Mechanical Engineers (ASME) Member and Executive Officer

American Society of Nuclear Technologists (ASNT) Member and Board Officer

Areas of Concentration

Mechanical engineering
Accident analysis
Industrial safety
Construction site safety
OSHA

Crane safety
Rigging
Non-destructive testing
Safety training

Specific Experience & Interest

Crane operations
Crane design
Crane supervision
Crane planning and layout
Heavy lift study
Lift plan analysis and-verification
On-site support and training
Lifting frames & fixtures
Cherry pickers
Air compressors
Blast hole drills

Special rigging design
Crane user safety program
Tipovers/rollovers
Winches
Chain
Hoists
Wire rope
Cables
Forklifts
Ramps
Tilt-up construction

Professional Experience**Institute for Products, Engineering & Construction****2000 to Present**

Consulting and forensic engineering services for attorneys and insurance companies. Projects address safety, training and accident investigation involving crane, lifting and rigging activities.

Los Alamos National Laboratories**1983 to Present**

Engineering Team Leader. Supervise Engineering staff responsible for all construction activities at the site. Engineer responsible for nuclear safety, equipment design and equipment operation while handling critical high value loads with large capacity mobile cranes. Developed and implemented single point failure program for mobile cranes and rigging. Developed and implemented a structural material Fracture Safety Program for all critical crane handling applications. Designed user friendly crane safety programs and special rigging hardware for nuclear safety.

Performed fault tree evaluation of critical mobile crane components, crane operations and rigging hardware. Implemented corrective changes and actions based on risk assessments of the fault tree analysis. Additional duties consisted of total field management during critical crane operations and specialized drilling programs.

Reynolds Electrical and Engineering Co.**1970 - 1983**

Equipment Engineer responsible for design and performance analysis of construction equipment, forklifts, drill rigs, compressors and mobile cranes. Responsible for developing performance specifications for procurement of unique construction and lifting equipment. Developed specialized Non Destructive Testing (NDT) program for forklifts, drill rigs and mobile cranes to assure safe performance. Developed equipment certification program for forklifts, drill rigs, overhead hoist and all types of mobile cranes. Additional assignments consisted of accident investigations and evaluations on mobile drill rigs, forklifts and mobile cranes. Designed special "deadman systems" and redundant structures for mobile cranes that prevent load loss. As an Engineering Section Chief, planned and directed the activities of seven mechanical/structural engineers and support staff

Oldsmobile Division of General Motors Corporation**1964 to 1970**

Project Test and Design Engineer responsible for design, development and testing of various automotive components in chassis and engine-driveline area. Responsible for customer evaluation, mass production quality, reliability testing and warranty claim analysis on automatic transmissions. Performed design analysis and customer evaluation on 350 and 425 series transmission, driveline components, and shift linkages.