

Credentials

Professional Engineer
Texas License # 63297

Education

Bachelor of Science in Mechanical Engineering
University of Tennessee, 1978

Graduate Studies toward MBA at University of Texas, 1979 - 1980

Continuing Education seminars and programs including: Project Management and Control; Computer Aided Design and Engineering; Configuration Management; The use of Finite element methods for analysis; Computer Aided Design and Manufacturing; Use of Geometric dimensioning and Tolerancing; Aircraft thin sheet structural analysis

Professional Associations

American Society of Mechanical Engineers - ASME
Institute of Electrical and Electronics Engineers

Professional Service Positions

American Society of Mechanical Engineers, Professional Society Liaison Committee representative to Dallas Area Rapid Transit Agency
American Society of Mechanical Engineers, North Texas Electronics Packaging Division Board Member

Patents

Digital blood pressure monitor, U.S. Patent # 323712

Seminars & Publications

"High-performance Mount for the SOAR telescope project", Proceedings of the SPIE, Volume 4004, March 2000.
"Exploiting advanced composite materials for lightweight shipboard SHF SATCOM antennas", IEEE MilCom Conference, October 1994.

Areas of Concentration

Mechanical engineering
Marine engineering
Civil engineering
Environmental engineering
Accident analysis

Materials engineering
Manufacturing engineering
Structural engineering
Aeronautical engineering
Machine design

Specific Experience and Interest

Strength of materials
Acoustics
Aerial devices
Aeronautical accidents
Aerospace welding
Air conditioning systems & equipment
Airframes
Ansi standards
Appliances
Arc welding
Automatic temperature controls
Automobile component manufacturing
Avionics
Biomechanics
Capacitors
Cargo
Castings
Cherry pickers
Computer applications
Microwave towers
Optics
Packaging
Piping design
Pneumatic systems
Semiconductors
Site assessments
Wire rope

Plastics design & defects
Electrical devices & equipment
Exercise equipment
Consumer products
Construction fasteners
Cooling towers
Docks & wharves
Ductwork
Electric doors
Electric motors
Ergonomics & human factors
Fabrication
Fans
Fiberglass insulation
Flame resistance
Foundries
Glass containers
Golf carts
Heaters
Hvac
Hydraulic systems & equipment
Industrial machines
Forklifts
Machine guarding
Pressure vessels
Radar
Printed circuit boards

Professional Experience**Institute for Products, Engineering & Construction** **2001 to Present**

Forensic Engineering and Expert Witness Consulting to attorneys and insurance companies. Projects involve the disciplines of mechanical, electrical and electronic engineering and address design defects and safety aspects of manufactured products.

Consulting Engineer **1998 to Present**

Systems integration and new product development for industry. Projects include development of structures, mounts and drive systems for state of the art optical telescope; design and development of upgraded drive system for existing optical telescope; optimization of structural design for trailer-mounted telecommunications antenna; development of cooling system for electronic equipment.

Cybex Technologies **1996-1998**

Management of multi-disciplinary teams to develop and build equipment for high accuracy semiconductor assembly. Projects included development of a die bonder for fiberoptic communications, resulting in the first highly flexible, fully automated assembly machine for the telecommunications industry; development of an automated inspection machine for laser die applications; development of a system of modular components to allow the construction of custom machines using standard subassemblies.

Electrospace Systems **1988 - 1996**

Guided mechanical engineering effort for development of transportable 20 foot diameter satellite communications Antenna

Timeback Systems **1983 - 1988**

Developed concepts and designed and analyzed new sensor products for industrial and consumer products, including first cuff-mounted digital blood pressure monitor.

Varo, Inc. **1979 - 1983**

Performed structural analysis and thermal design for defense contractor on tank and missile launcher projects..

Rockwell International **1978 - 1979**

Engineering and design for advance military communications system including design of electronic enclosures and electromagnetic shielding and thermal analysis of enclosures and printed circuit boards.

Lockheed Aircraft **1974 - 1977**

Work in various departments including wind tunnel testing of airfoil sections, aerodynamic and stress analysis.