

JOSEPH RUIS, P.E.

Senior Engineer I

PROFILE

Mechanical engineer with 26 years of broad experience in project management, energy management, manufacturing, product design, software development, quality assurance, failure analysis, consulting, environmental engineering and performance testing. Fourteen years of Program/Project Management experience with ten years of government contract management experience.

EDUCATION

M.S., Mechanical Engineering, University of Pittsburgh, 1996

B.S., Mechanical Engineering Technology, University of Pittsburgh at Johnstown, 1984

CERTIFICATIONS/TRAININGS/AFFILIATIONS

Registered Professional Engineer in Pennsylvania

American Society of Mechanical Engineers, Member

Top Secret Security Clearance

ACCOMPLISHMENTS

- Managed three Department of Defense contracts concurrently with a total value of \$8 million
- Consistently completed contracts within budget and on schedule while earning maximum fee and profit
- Developed corporate-wide policies and procedures for Capability Maturity Model quality control process
- Managed project teams consisting of personnel from multiple office locations
- Responsible for budget and schedule of multiple contracts and task orders
- Designed and supervised construction of several prototype trucks and trailers
- Reduced material cost and labor on the aluminum transfer trailer assembly line
- Formulated policies and procedures for ASME and ISO 9000 standards and received certification of both
- Maximized revenue by assisting in the completion of utility boiler outages ahead of schedule
- Assisted in the development of weld procedures using minimal preheat to reduce repair cost
- Determined the structural integrity of high pressure piping using finite element analysis
- Assured all assigned maintenance projects were completed on schedule
- Developed preventative maintenance schedules that reduced operating costs and overtime expenses
- Managed extensive boiler tests requiring coordination of numerous support personnel
- Developed computer models of off-design plant operation to increase awareness of plant inefficiencies

PROFESSIONAL EXPERIENCE

Sr. Engineer (Present)

Cambria Consultants, Inc.

- Mechanical Design and Safety

Program Manager (September 2000-Present)

MTS Technologies, Inc.

- Program Manager of energy management, systems engineering and software development projects for the U.S. Army.

- Current programs include development and testing of wireless facility energy management systems and creating software modules for mobile medical data collection systems.
- Recent programs involved integrating various portable medical devices with a laptop to provide remote medical patient monitoring and the development of a medical readiness trend analysis tool and a distance learning application for medical procedures refresher training.
- Previously managed programs utilizing speech recognition technology for hands-free data collection.
- Develop proposals for systems engineering and software development projects.

Project Manager (September 2000-May 1998)

MTS Technologies, Inc.

- Managed an engineering team responsible for research and design projects.
- Responsible for managing Project Engineers, Research Analysts, Technical Writers and CAD operators in support of all U.S. Army trailer contracts. Projects included trailer retrofit kits for anti-lock brake systems; automatic tire inflation systems and fuel tanker overfill protection. Studies included finite element modeling for design, modification and failure analysis. Contract completion included Engineering Change Proposals, Engineering Release Records and CAD drawings using military standards and specifications. Another project included developing a voice activated wearable computer for Army technicians to perform diagnostics utilizing vehicle onboard computers.

Project Manager (July 1996-May 1998)

Somerset Welding and Steel

- Responsible for product development and design of aluminum and steel truck bodies and trailers including tankers, transfer trailers, compactors, flatbeds, dump bodies, and hoists.
- Designer and Quality Control Manager for ASME pressure vessels and DOT tanker construction.
- Performed design of hydraulic and pneumatic systems.
- Responsible for the research, design, material selection, fabrication and development of new products.

Engineering Consultant (February 1995-July 1996)

World Wide Products, Inc.

- Provided engineering services to the electric utility industry through inspection and repair recommendations for boiler pressure components.
- Also involved in boiler efficiency testing, burner optimization setting and exhaust gas emission monitoring.

Technical Services Engineer (February 1985-February 1995)

General Public Utilities (Pennsylvania Electric Company)

- Provided project management during maintenance outages.
- Responsible for inspection, repair and budget of generating station boilers and related equipment. This involved engineering analysis of pressure components to provide safe and reliable plant operation using structural and thermal modeling.

Planning Engineer (February 1985-February 1995)

General Public Utilities (Pennsylvania Electric Company)

- Project management from conceptual engineering to detailed design.
- Performed generating station maintenance scheduling.

Environmental Engineer (February 1985-February 1995)

General Public Utilities (Pennsylvania Electric Company)

- Responsible for assuring the reliability and accuracy of flue gas emission monitors used at coal-fired generating stations. Supervised eight technicians who performed maintenance on this equipment.

Thermal Performance Engineer (February 1985-February 1995)

General Public Utilities (Pennsylvania Electric Company)

- Performed tests on various pieces of equipment, evaluated the test results and made recommendations to improve plant efficiency.