



Development Engineering

McCormick Stevenson offers a wide range of mechanical engineering expertise; from deep systems engineering to routine drafting and design, and everything in-between. We help reduce your program risk through clear requirements definition, flexible contract engagements, and the immediate application of a qualified and experienced staff. We tailor our work products to your internal systems and processes. McCormick Stevenson also exercises rigorous cybersecurity practices. We always protect your sensitive data and intellectual property.

We stand ready to partner whenever a critical need arises. Look to the McCormick Stevenson team for a well-honed engineering toolset that brings solutions and success.

- Accelerate programs with experienced armament systems engineers and designers
- Identify, manage, and mitigate program risk
- Optimize system Size, Weight, Power, and Cost (SWaP-C)
- Ensure product survival under shock and vibration
- Ensure Hi-G gun-launch survivability
- Ensure steady state and transient performance at temperature extremes
- Reduce cost through design for manufacturing and assembly
- Develop and deliver product Technical Data Packages (TDPs)
- Develop virtual and physical prototypes of products
- Access, identify, and track system requirements and associated Verification and Validation Plans
- Manage and execute system test and qualification
- Integrate products into land, air, and maritime platforms
- Develop and deliver custom tooling, fixtures, and equipment to support products

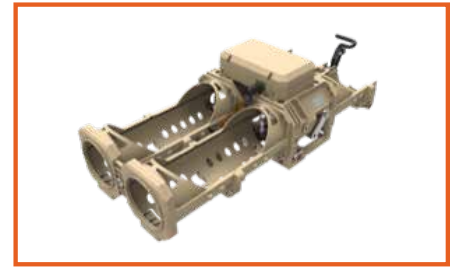
FOUNDED
IN 1999

OFFICES IN
CLEARWATER, FL

WOMAN-OWNED
SMALL BUSINESS

DOD PERSONNEL
AND FACILITY
CLEARANCES

NON-TRADITIONAL
DEFENSE CONTRACTOR



COLLABORATION

COLLABORATION



Expertise Across the Entire Product Development Cycle

Look to McCormick Stevenson as your mechanical engineering partner. We can help with your entire product development process or assist at **any** stage to address your specific challenges.

System Engineering

Ensure success through clearly defined requirements, tightly coupled to verification and validation plans.

- Proposal Development
- Requirements Development
- Risk Assessment and Management
- Implementation Balance
- Baseline Definition
- Verification and Validation Planning
- Configuration Management

Product Design

Move quickly to production revenue by leveraging our design expertise.

- Munitions System Design
- Mechanically Rugged Electronics
- Concept Development and Trade Studies
- 3-D Solid Modeling, Drafting and Documentation
- Design for Manufacturing and Assembly
- Cabling and Interconnect Design

Prototyping and Integration

Successfully test and qualify through selective physical prototyping.

- Prototype Fabrication & Assembly
- Rapid Component Sourcing
- 3-D Printing

Analysis & Simulation

Breeze through integration and test with elegant virtual prototypes.

- Finite Element Analysis (FEA)
- Computational Fluid Dynamics (CFD)
- Design-to-Analysis Data Interoperability
- FMECA (Failure Mode, Effects & Criticality Analysis)
- Tolerance analysis using both worst-case and statistical methods
- Analysis and Simulation Reporting
- Reliability Analysis

Development Test & Qualification

We satisfy every requirement, or we're not done.

- Test Plan Development
- Platform Integration
- Lab and Field Integration, Test and Evaluation
- Structural and Thermal Analysis and Test Correlation
- Test Procedure Generation
- Test Program Management and Reporting

**MCCORMICK
STEVENSON**

VISIT WWW.MCCST.COM
25400 US HWY 19 NORTH, SUITE 162, CLEARWATER, FL 33763 ■ (727) 735-9633



Production Engineering

The manufacturing of Defense & Aerospace systems demands precision, expertise, and attention to detail. With design and consulting services focused on Specialty Equipment, Quality Systems, Manufacturing Inspection, Test Systems, and Process Development, McCormick Stevenson brings broad capability to bear on your manufacturing challenges. As part of a larger product development organization with extensive experience in design for manufacturability, test, and assembly, McCormick Stevenson effectively bridges the gap between Product Development and Production.

McCormick Stevenson offers solutions in the following areas:

- Equipment Design & Automation
- Manufacturing Process Development
- Quality Systems Support
- Manufacturing Inspection Services
- Technical Publications



FOUNDED
IN 1999

OFFICES IN
CLEARWATER, FL

WOMAN-OWNED
SMALL BUSINESS

DOD PERSONNEL
AND FACILITY
CLEARANCES

NON-TRADITIONAL
DEFENSE CONTRACTOR



Equipment Design & Automation

Reduce manufacturing costs and improve product reliability through process and incremental design improvement:

- Tooling, Gaging, Assembly, and Test Fixtures
- Manufacturing Process Equipment Design and Fabrication
- Test Equipment Design and Fabrication
- Design for Manufacturability, Assembly, Inspection, and Test (DFx)
- Reverse Engineering
- Documentation of existing processes and current state of manufacturing equipment
- Automated Equipment

Manufacturing Process Development

Increase manufacturing efficiency with proper manufacturing resource planning (MRP):

- Floorplan Design, Development, and Optimization
- Process Flow Development and Machine Configuration
- Manufacturing Process Plan Development, Review, and Scheduling
- Manufacturing Documentaton and Planning
- Manufacturing Operations Management Consulting
- On-Site Manufacturing Support

Technical Publications

Improve quality with procedures everyone can follow:

- Quality Documents (Quality Manuals, Inspection Plans)
- Training Documents
- Assembly/Work Instructions
- Standard Operating Procedures
- User Guides and Owner's Manuals

Quality Systems Support

Improve yields through:

- Lean Six Sigma Manufacturing Process Optimization
- Measurement Systems Analysis (MSA)
- Gage Repeatability and Reproducibility (R&R)
- Statistical Process Control (SPC)
- Measurement Systems Evaluation (MSE per DI-QCIC-81960)
- Contract Data Requirement List (CDRL) Deliverables

Manufacturing Inspection Services

Demonstrate product quality with inspection and reporting:

- Dimensional Inspection Services
- Turnkey Measurement Systems
- On-site Test and Inspection Support
- ISO/IEC 17025:2017, PJLA Testing Accreditation #117064

**MCCORMICK
STEVENSON**

VISIT WWW.MCCST.COM
25400 US HWY 19 NORTH, SUITE 162, CLEARWATER, FL 33763 ■ (727) 735-9633



Manufacturing Inspections Services

In conjunction with our Manufacturing & Test Systems Capabilities, McCormick Stevenson offers Manufacturing Inspection Services in our on-site lab facility. These services are provided with rapid turnaround time and complete documentation. By handling your dimensional inspection services needs, we are able to provide a variety of outsourcing benefits to you such as increased flexibility, quicker turnaround time, access to industry expertise, reduced labor costs and improved risk management. ISO/IEC 17025:2017, PJLA Testing Accreditation #117064

FOUNDED
IN 1999

OFFICES IN
CLEARWATER, FL

WOMAN-OWNED
SMALL BUSINESS

DOD PERSONNEL
AND FACILITY
CLEARANCES

NON-TRADITIONAL
DEFENSE CONTRACTOR



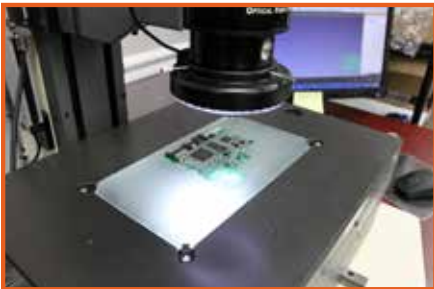
Contract Inspection

- First Article Inspection (FAI)
- Batch Inspection for Key Characteristics
- Capability Studies
- Visual Inspection and Sorting
- Source Inspection
- Turnkey Inspection Systems
- Project Management
- Reverse Engineering



Complete Outsourcing Program

- Part Inspection (rework and complete final processes as required)
- Interface with supplier regarding discrepancies and clarifications
- Packaging
- Ship to final destination



Online and Offline CMM Part Programming

- Dimensional Measuring Interface Standard (DMIS)
- Coordinate-Measuring Machine (CMM Manager)

Inspection Services Equipment

McCormick Stevenson uses state-of-the-art equipment for all our Inspection Services needs. Below are details on the various tools we use and have access to in our Manufacturing Inspection Lab.

Numerex DCC CMM (40" x 28" x 24")

- Coordinate Measuring Machine
- Volumetric Accuracy .00025"
- Renishaw PH9 Probe System
- CMM-Manager Software (Nikon)

Helmel DCC CMM (16" x 20" x 14")

- Coordinate-Measuring Machine
- Volumetric Accuracy .00020"
- Renishaw PH8 Probe System
- CMM-Manager Software (Nikon)

Standard Inspection Equipment

- Various handheld measuring tools