



## BACKGROUND

Mr. Vigo is a licensed professional mechanical engineer with experience in inspection and failure analysis of automotive, commercial, and industrial equipment. He has eight years of experience in industrial inspection; including structural cellular tower modifications, structural tower inspection, and API storage tank, pressure vessel, and piping inspections. His experience also includes special access climbing and fall arrest systems, lockout/tagout procedures, and safe work permitting and procedures. He specializes in API tank and vessel inspections, repair, and design, as well as fall arrest and weld inspection.

Mr. Vigo earned his Bachelor of Science in Mechanical Engineering. He achieved a Minor in Physics, as well as a specialization in Thermal Fluids.

## AREAS OF SPECIALTY

- Inspection and Failure Analysis of:
  - Mechanical Components
  - Pressure Vessels and Piping
  - Towers/Aerials
  - Electrical Components
  - Hydraulic Components
  - Control Systems
- Machine Guarding, Lock out/Tag out
- Industrial and Construction Safety
- Mechanical Engineering
- Consumer Appliance Failure
- Accident Investigation
- Codes and Standards
- Piping/Plumbing/HVAC
- Power Tools
- Fall Arrest Systems and Safety
- Forensic Engineering

## EDUCATION & TRAINING

- Bachelor of Science in Engineering (Mechanical), Florida State University
  - Minor in Physics
  - Specialization in Thermal Fluids
- Certified Bosch Crash Data Retrieval (CDR) Technician, University of North Florida Institute of Police Technology and Management
- Certified Weld Inspector, American Welding Society, January 1, 2019
- "API-653 Aboveground Storage Tank Inspector," American Petroleum Institute, September 30, 2021
- "API-570 Piping Inspector," American Petroleum Institute, April 30, 2022
- "ACCP Level II VT," American Society for Nondestructive Testing, October 1, 2022
- "API-510 Pressure Vessel Inspector," American Petroleum Institute, March 31, 2024

## PROFESSIONAL REGISTRATIONS

- Registered Professional Engineer in the State of Georgia – 2023. #050023

## PROFESSIONAL EXPERIENCE

### 2024 – Present | ARCCA, LLC | Senior Engineer

- Failure analysis of automotive, consumer, and industrial equipment and mechanical systems.
- Inspection of weldments, e.g. towers, piping, pressure vessels.
- Investigation and reconstruction of motor vehicle accidents.

### 2023 -- 2024 | McSwain Engineering, LLC | General Manager

- Responsible for daily operations at the firm.
- Additionally, he performs as a forensic investigator with expertise in mechanical engineering, storage tanks, pressure vessels, and process piping.

### 2020 -- 2023 | Applied Technical Services | Senior Engineer

- Perform inspections of storage tanks, pressure vessels, and process piping under supervision of API 653/510/570 certified engineers and licensed Professional Engineers.
- Generate reports of inspection findings.
- Perform calculations for minimum required thicknesses, corrosion rates, theoretical remaining life, and inspection intervals on process equipment.
- Coordinate and supervise non-destructive testing (NDT) personnel in inspection of storage tanks, pressure vessels, and process piping.
- Perform piping inspections including visual inspection, supervise non-destructive testing (NDT) personnel in acquiring thickness measurements on piping systems, and generating isometric drawings of piping systems.
- Generate piping inspection reports and repair plans as needed.

### 2016 – 2020 | Tower Engineering Professionals | Project Lead

- Manage tower structural modification inspection division in Florida and Puerto Rico.
- Perform certified weld inspections on field welded portions of structural modifications.
- Confirm accurate construction of modifications based on engineering drawings.
- Correspond with contractors on scheduling and organizing site visits. Lead field crews in general inspections and mapping of various tower structural components.
- Create and compile inspection reports.

## LICENSURE & CERTIFICATIONS

- “Certified Weld Inspector,” American Welding Society, January 1, 2019
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## PROFESSIONAL MEMERSHIPS

- American Welding Society (AWS)

## CONTINUING ENGINEERING EDUCATION

<b><u>Course Title</u></b>	<b><u>Source</u></b>	<b><u>Date</u></b>
Practical Plant Failure Analysis	Applied Technical Services	2023
Practical Mechanical Integrity	Applied Technical Services	2023
Mechanical Integrity Technical Writing	Applied Technical Services	2023
FRP301 V2 Intro to Manufacturing, Quality Assurance and Condition Assessment	Fiberglass Reinforced Plastics Institute	2022
Hail & Wind Damage to Residential Roofs	HAAG Education Co.	2024
Water Damage Repairs & Replacement	HAAG Education Co.	2024