



**Innovation  
in Action**

www.aei-tech.com

**analytical engineering**

# Capability Statement

## Core Competencies

AEI was founded in 1994 and is an SBA certified minority woman owned small business. Development of engines, vehicles, hybrid vehicles, testing rig systems, components, and instrumentation is performed onsite with engineers, technicians, and a full array of equipment. AEI works with clients to rapidly develop and deliver products for multiple industries.

### Motoring Dynamometer Test Cells

- Engine Performance
- Durability
- Diesel, Ethanol, Natural Gas
- Controlled Air Temp & Humidity
- Emissions Measurement
- Cold Start to -40C
- Altitude Simulation to 15,000 ft
- Aftertreatment Development

### Drive-In Ambient Chamber

- Bus, Truck, Non-Road, Forklifts
- Cold Soak down to -50C
- Hot Soak up to 60C
- Door Entry Size 14ft x 14ft

### Design, Machining, & Fabrication

- Engineering Design
- 3-D Scanning
- 5-Axis CNC Machining
- Waterjet
- Software Integrated Controls and Data Acquisitions Systems

### Custom Rig Testing

- Extreme Temp to 800C
- Thermal Cycle 170C to -70C
- Injectors - Fuel System, SCR Dosing
- Thermostats, EGR Valves

### Vehicle Development Center

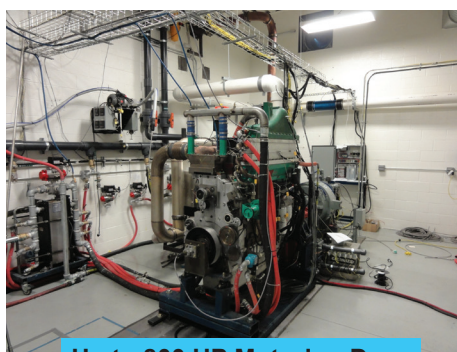
- Buses, Trucks, Vans, Cars
- Diesel and Hybrid
- Exhaust Aftertreatment Integration

### Electric Vehicle Systems & Components

- Electric Vehicle Prototype Build
- Battery Development
- Electric Motor Controller



Engine Development Cells



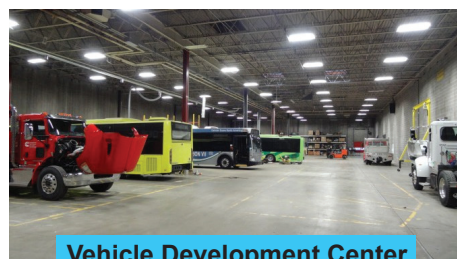
Up to 800 HP Motoring Dyno



Drive-In Cold Chamber



Instrument Design & Mfg



Vehicle Development Center

## Differentiators

- Innovative & Collaborative Approach
- Onsite Equipment, Capabilities, and Knowledgeable Staff for Rapid Delivery of Confidential and Complex Projects from Concept to Working Prototypes

## Past Performance

- Worldwide Customer Base with over 50 Commercial Clients
- Government Agency Contracts:
  - US EPA
  - CARB
  - NREL
  - US Army
  - US Navy

## Company Data



MBE Certified



Hire Vets  
Platinum



Women-Owned  
Certified

**CAGE Code: 034K8**  
**UEI: K4J2R8A12E71**

## Primary NAICS Codes

- 541690: Other Scientific and Technical Consulting Services
- 334516: Analytical Laboratory Instrument Manufacturing
- 333618: Other Engine Equipment Manufacturing
- 332710: Machine Shops
- 541380: Testing Laboratories
- 541511: Custom Computer Programming Services
- 541330: Engineering Services