



FEMA Corporation

Advanced Electro-Hydraulic Solutions for **Automotive & Heavy Vehicle Systems**

FEMA Corporation designs and manufactures **advanced electro-hydraulic proportional valves and custom manifolds** used in safety and performance-critical vehicle systems.

- **Location:** Portage, Michigan, USA
- **Model:** Engineering-led supplier, early development involvement
- **Focus:** Precision control, repeatability, long-life performance
- **Experience:** 50+ years supplying Tier 1 OEMs

▶ **Engineering Integration**

FEMA is an **extension of the OEM engineering team**

- Valve and manifold architectures tailored to specific vehicle architectures
- Compact integration supporting space, weight, and efficiency targets
- Alignment with electronic control units, sensors, and software logic

▶ **Validation & Development Support**

FEMA incorporates **ISO 17025:2017 certified testing** into all our product lifecycles

- Application-specific performance testing
- Iterative design refinement
- Documentation aligned with OEM validation and release processes

▶ **Reliability & Lifecycle Performance**

FEMA products are designed for **continuous-duty vehicle environments**

- Stable performance over long service life
- Robust designs tolerant of vibration, contamination, and temperature extremes
- Emphasis on repeatability, robustness, and lower warranty cost exposure

Vehicle Dynamics & Driveline Control

FEMA's electro-hydraulic solutions support advanced vehicle systems where fast, accurate, and repeatable control directly affects safety, ride quality, and drivability.

Active & semi-active suspension systems: ride control, stability, and comfort

Clutch, limited slip, & active differentials: torque management and traction control

Power-shift & power-shuttle transmissions: smooth gear changes and durability

Control-by-wire systems: precise electro-hydraulic actuation command

Braking Systems: immediate safety and control



ISO 9001:2015 | ISO 14001:2015 | ISO 17025:2017 | IATF 16949:2016

1716 Vanderbilt Avenue, Portage, MI 49024 | +1-269-323-1369 | fema-corp.com | sales@fema-corp.com



FEMA Corporation delivers **precision, reliability, and disciplined service**

Supporting your engineers from **development through production**

▷ **Total Cost of Ownership**

FEMA focuses on **overall system-level value**

- Reduced system complexity
- Improved durability and service life
- Lower risk of late-stage design changes
- Fewer quality escapes in the field



▷ **Functional Safety & Risk Alignment**

FEMA supports OEM programs with awareness of **functional safety and control requirements**

- Designs compatible with safety-oriented system architectures
- Clear documentation, traceability, and change control
- Engineering support during development and series production



▷ **Supplier Qualification Alignment**

FEMA directly **supports purchasing and supplier quality teams**

- Clear qualification and approval roadmap
- Defined documentation and production change control
- U.S.-based, repeatable processes, long-term supply mindset aligned with multi-year vehicle platforms

▷ **Typical Engagement Path**

1. Target application discussion
2. Concept and feasibility review
3. Prototype and validation support
4. Supplier qualification
5. Series production and lifecycle support

Where to Begin?

FEMA welcomes a **joint engineering and purchasing discussion** to:

- Review system performance or control challenges
- Align on supplier evaluation and safety expectations
- Identify a focused pilot or development program

ISO 9001:2015 | ISO 14001:2015 | ISO 17025:2017 | IATF 16949:2016

1716 Vanderbilt Avenue, Portage, MI 49024 | +1-269-323-1369 | fema-corp.com | sales@fema-corp.com