

FEMA Corporation

Advanced Electro-Hydraulic Solutions for **Mining and Off-Highway Platforms**

FEMA Corporation designs and manufactures **advanced electro-hydraulic proportional valves and custom manifolds** for the most demanding mobile equipment applications

- **Location:** Portage, Michigan, USA
- **Model:** Engineering-led supplier, early development involvement
- **Focus:** Precision control, durability, lifecycle support
- **Experience:** 50+ years supplying off-highway OEMs

▶ Engineering Integration

FEMA works as an **extension of the OEM engineering team**

- Custom valve and manifold architectures tailored to machine and implement functions
- Compact integration to reduce hoses, leak points, assembly time, failure modes, and potential warranty costs
- Alignment with OEM control architecture and safety strategies

▶ Validation Support

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

- Application-specific performance and durability testing
- Iterative refinement during development
- Documentation aligned with OEM validation and release processes

▶ Extreme-Duty Reliability & Lifecycle

FEMA products are designed for **continuous, extreme-duty mining and off-highway environments**

- Stable performance over long operating hours and harsh conditions
- Robust designs tolerant of contamination, vibration, shock and temperature extremes
- Emphasis on uptime, serviceability, and long component life
- Reduced downtime risk, improved machine availability, and lower warranty cost exposure

Mining & Off-Highway Equipment

FEMA solutions are especially relevant where smooth, predictable hydraulic control under extreme loads is critical. In large haul trucks, hydraulic excavators, and mining shovels, precise proportional control **improves machine responsiveness, reduces structural and hydraulic shock, and supports safe, repeatable operation in continuous-duty environments.**





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**

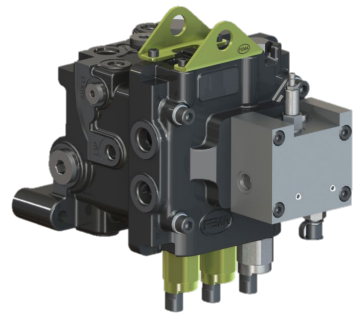
- Reduced system complexity
- Improved uptime and service life
- Lower risk of late-stage design changes
- Fewer quality escapes in the field



▷ **Supplier Qualification Alignment**

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

- Clear qualification and approval roadmap
- Defined documentation, traceability, and change control
- U.S.-based, repeatable processes, long-term supply mindset aligned with multi-year 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 Corporation welcomes a **joint engineering and purchasing discussion** to:

- Review control, durability, or integration challenges
- Align on supplier evaluation expectations
- Identify a focused pilot or development application