Team Experience

MAGNETICS:

Custom innovative actuators and sensors
MEMS actuators
Navy aircraft launcher and arrestor
Maglev high-speed trains & rocket sleds
Minesweeper and submarine cloaking
Permanent magnet machine signature analysis
Electromagnetic spacecraft launcher
Magnetic motor resolvers

MECHANICAL and ROBOTIC SYSTEMS:

Man/machine force feedback interfaces
Zero backlash 2 DOF joints
Active and passive noise cancellation systems
Active center of mass controls
Proprietary automotive system development
Robotic drive and transmission systems for multi-DOF control

ELECTRONIC SYSTEMS:

Voltage– and Current-mode controllers
350 HP motor controllers
Distributed control and power systems
Commercial switching devices
Electric vehicle components
Microprocessor programming for intelligent peripherals
Electronic control systems for haptics

We are innovation experts

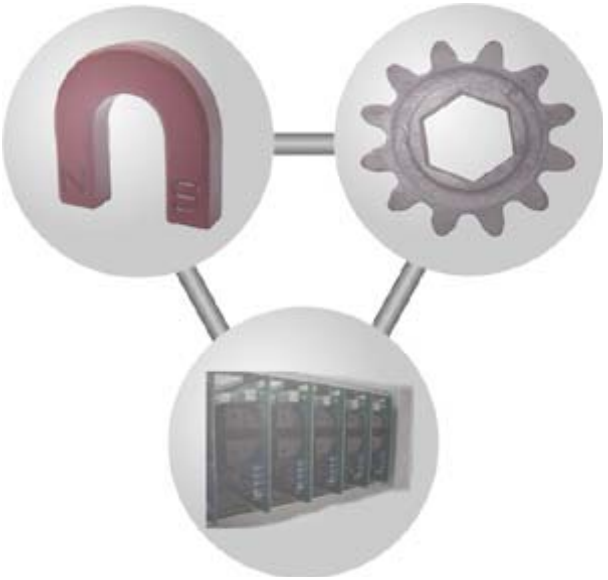
Engineering Matters has helped our clients develop:

- Force feedback devices
- Microcontroller systems
- Sensors & robotics systems
- Electromagnetic devices from MEMS to Maglev
- Motor/generators and electromagnetic drives
- Electronics for motor control
- Electromagnetic signature reduction systems

Call: 617-965-8974
Toll Free: 877-202-2246
Email: info@engineeringmatters.com
Visit our website:
www.engineeringmatters.com

ENGINEERING MATTERS®

Innovation Experts



The SCIENCE You Need - ENGINEERED To Work™

ENGINEERING MATTERS®

We excel at doing what has never been done before

Our Objective:

Provide you, our customer, with research and development expertise in the conception, design, and fabrication of hardware and software products by combining creativity, technical analysis and practical experience to produce state-of-the-art solutions in a cost-effective manner.

Electromagnetic Engineering

- Motors
- Power Supplies
- Maglev
- Magnetic Bearings
- Electromagnetic Shielding
- Ionospheric/Magnetospheric EM Effects
- Electric Vehicles
- EM Analysis
- Electrical Distribution

Mechanical Engineering

- MEMS
- Actuators
- Robotics
- Linkages
- Drive Systems
- 3D Modeling

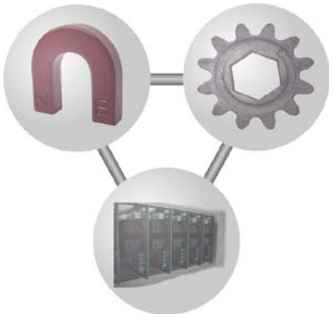
Electronic/Software Engineering

- Control Systems
- Embedded Processing
- Microcontroller Programming
- Data Acquisition, Reduction & Analysis

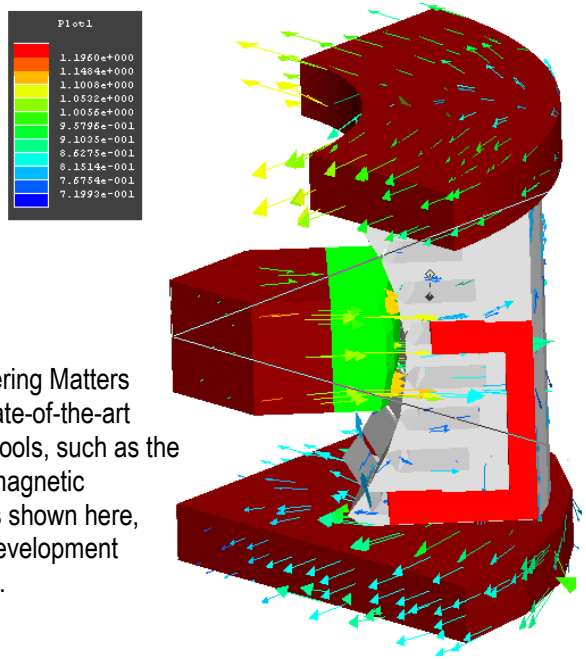
System Integration

Engineering Matters believes strongly that successful development occurs only when the entire system is considered at every stage of the design process.

Each member of our team is knowledgeable in more than one field. This enables a more effective and efficient design methodology.

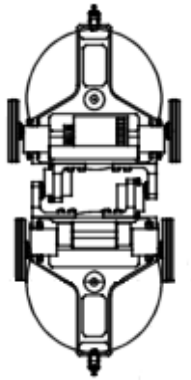


Using this cross-specialization, we can perform all stages of a project for you, from initial concept through production.



Engineering Matters uses state-of-the-art design tools, such as the electromagnetic analysis shown here, in the development process.

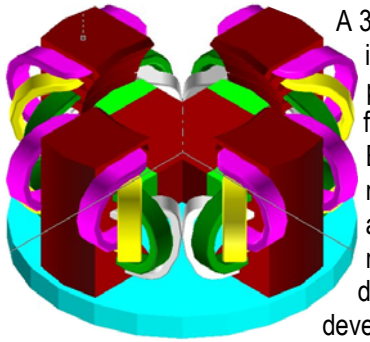
The Client required a robot that could climb walls, then "fold" to transition to ceilings. After extensive research and experimentation, Engineering Matters developed a "wall crawler" robot, two views of which are shown here.



Let Engineering Matters:

- ***Create***
- ***Innovate***
- ***Accelerate***

Your Business



A 3D rendering of the internals of a high-power force-feedback joystick. Engineering Matters makes full use of advanced computer modeling during the design and development process.