



Our new 1000 square foot lab is equipped with the following instruments:

- Magtrol Dynamometers
- Magtrol Power Analyzers
- Dyno Controller
- LCR Meter
- Milliohm Meter
- Power Supplies
- Oscilloscopes

Call us today for your testing and analysis needs!



## William H. Yeadon, P.E.

President

BS Degree – University of Dayton

40 years of motor industry experience

Editor:

Handbook of Small Electric Motors  
(McGraw Hill)

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**YES** is SBA and HUBzone certified.

## Bradley M. Frustaglio P.E.

Design Engineer

Mechanical Engineering Degree

Michigan Technological University



An experienced firm specializing in the design and prototype fabrication of electromagnetic devices including electric motors, generators, and actuators.

- \*Design
- \*Software
- \*Consulting
- \*Cost Reduction
- \*Prototypes
- \*Training
- \*Testing
- \*Analysis

## Design of AC Motors

- ~ Single Phase
- ~ Polyphase
- ~ Permanent Split Capacitor
- ~ Capacitor Start
- ~ Split Phase
- ~ Synchronous
- ~ Shaded Pole
- ~ Series Wound Universal

## Design of DC Motors

- ~ PMDC
- ~ Brushless DC
  - Inner Rotor
  - Outer Rotor
  - Axial Air gap
- ~ Switched Reluctance
- ~ Wound Field DC
  - Series
  - Shunt
  - Compound

## Design of Stepper Motors

- ~ PM Stepper
- ~ VR Stepper
- ~ Hybrid Stepper
- ~ Associated Drives

## Drawings

- ~ Hard copy & electronic format

## Consulting

- ~ Design Review
- ~ Analyze production problems
- ~ Review manufacturing systems
- ~ Improve design to fit systems
- ~ Minimize new parts
- ~ Recommend appropriate improvements

## Prototypes

- ~ All Motor types and sizes
- ~ Procure parts and laminations
- ~ Subassemblies and assemblies

## Facilities

- ~ Machine Shop
- ~ Winding Machines
- ~ Varnish Facilities
- ~ Test Lab

## Performance Testing

- ~ Speed-Torque, Current, Efficiency, etc.
- ~ Magtrol Equipment
- ~ 0 to 7 Kw pk.
- ~ Specialized S-T equipment
- ~ Thermal tests
- ~ Thermal Resistance
- ~ Thermal Capacity
- ~ Heat Aging test
- ~ Segregation of Losses

## Analysis

- ~ Design
- ~ Failure
- ~ Performance
- ~ Components
- ~ Feasibility Study

## Software

- ~ Brushless DC Motor
- ~ Permanent Magnet DC Motor
- ~ Universal Motor
- ~ Shaded Pole Motor
- ~ AC Induction Motor

## Training

- ~ SMMA Courses
- ~ Basic Motor Theory
- ~ Fundamentals of Electric Motor Design
- ~ Permanent Magnet DC Motor
- ~ Brushless DC Motor
- ~ Switched Reluctance Motor
- ~ Motor Fundamentals for Appliance Engineers
- ~ Universal Motor
- ~ Cost Reduction
- ~ Customized courses
- ~ In-house or internet based

## Cost Reduction

- ~ Set Up Program
- ~ Individual Projects
- ~ Value Analysis