



IES INFRASTRUCTURE Business Profile

Our Company MILESTONES

May 2015

- Acquired Southern Industrial Sales & Services in Columbus, GA..
- Motor repair and related field services, with diverse customer base.

Oct 2015

- Acquired Calumet Armature & Electric in Riverdale, IL.
- Manufacturer of new armatures, coils and motor components for traction motors; also a fully integrated industrial motor repair and rewind facility.

Jun 2016

- Acquired Technibus, Inc. in Canton, OH.
- Manufacturer of highly engineered, custom designed non-seg and iso-phase enclosed bus systems.

May 2017

- Divested assets of Magnetech Merrillville location to re-focus business.

Nov 2020

- Acquired Wedlake Fabricating in Tulsa, OK.
- Manufacturer of custom generator enclosures.

2013

- MISCOR acquired by Integrated Electrical Services, Inc.

Sep 2015

- MISCOR re-branded to IES Infrastructure Solutions .

Apr 2016

- Divested assets of HK Engine Components to re-focus business.

Mar 2017

- Acquired Freeman Enclosure Systems LLC in Batavia, OH.
- Manufacturer of custom, diesel generator enclosures for data center and commercial & industrial customers.

Feb 2020

- Acquired Plant Power & Control Systems in Alabaster, AL.
- Manufacturer & installer of custom engineered power distribution equipment.

LOCATIONS

- 1 **Boardman, OH**
Core Business: Magnets
- 2 **Canton, OH**
Core Business: Bus Duct,
Enclosure Systems, Switchgear
- 3 **Massillon, OH**
Core Business: Motors/Generators,
Pumps, Transformers, Switchgear,
Circuit Breakers
- 4 **Batavia, OH**
Core Business: Enclosure Systems
- 5 **Huntington, WV**
Core Business: Motors/Generators,
Rail Services
- 6 **Riverdale, IL**
Core Business: Armatures, Coils,
Motors
- 7 **Hammond, IN**
Core Business: Magnets, Machining
- 8 **Saraland, AL**
Core Business: Motors/Generators,
Pumps, Switchgear, Circuit Breakers
- 9 **Alabaster, AL**
Core Business: Custom Switchgear,
Engineering, Turnkey Installation
- 10 **Columbus, GA**
Core Business: Motors/Generators,
Pumps
- 11 **Tulsa, OK**
Core Business: Enclosure Systems



BUSINESS SEGMENTS



Magnetech services rotating & power equipment including: transformers, switchgear/circuit breakers, AC/DC motors and generators, exhaust fans, pumps, compressors, gear boxes, overhead cranes, & electromagnetic lifting magnets. Operating in five different locations nationwide, with the largest motor facility of 65,000 square feet in Massillon, Ohio.



Southern Rewinding provides sales & service for electric motors, pumps, gearboxes, generators, and other industrial equipment in the Southeast. Southern Rewinding operates in a 15,000 square foot manufacturing facility in Columbus, Georgia, primarily serving the Gulf Coast.



Technibus supplies metal enclosed bus systems including: Isolated Phase, Non-Segregated, and Segregated Phase Systems. Operating in a 260,000 square foot manufacturing facility in Canton, Ohio, Technibus serves the power generation, distribution, petrochemical, transit, municipal, data center and industrial markets.



Calumet manufactures and remanufactures large AC and DC electric motors for industrial and transit applications. Calumet's 24,000 square foot facility is based in the south side of Chicago in Riverdale, Illinois and provides services for the mass transit market throughout major metropolitan cities in the U.S.



Freeman manufactures custom generator enclosures that are primarily used by data centers and large commercial and industrial facilities. Based outside of Cincinnati, Ohio, Freeman operates in a 243,000 square foot manufacturing facility and supports customers throughout the U.S.




Plant Power provides professionally engineered power distribution equipment. Located in Alabaster, Alabama, Plant Power operates in a 24,000 square foot facility and supports pipelines, paper mills, steel mills, foundries, water treatment facilities, and electric utilities nationwide.



Wedlake manufactures custom generator enclosures and offers a full line of generator-related products, from interpreting written specifications to detailed submittal and fabrication drawings. Recently purchased a brand new 221,000 square foot manufacturing facility in Tulsa, Oklahoma to support growing demand from customers throughout the U.S.

Our Company
OFFERINGS

- 
- **Rotating Equipment:** Maintenance and repair services for electric motors, generators, and alternators
 - **Power:** Service and repair of transformers and power distribution equipment
 - **Custom Manufacture:** Manufacture of non-segregated, segregated phase and isolated phase bus duct systems, custom switchgear, diesel / natural gas-generator enclosures and Power Distribution Centers (PDC's) used by data centers and large commercial and industrial facilities
 - **Magnet:** Manufacture, maintenance, and repair services for industrial lifting magnets
 - **Rail:** Manufacture of new armatures, coils, and motor related components used in transit rail
 - **Field Service:** Field service across our entire service offerings for installation, testing, and maintenance

INDUSTRIES SERVED



With over 140 years of combined expertise in electrical equipment manufacturing and design, IES Infrastructure Solutions has the knowledge and capabilities to provide customized enclosure solutions. IES Infrastructure holds an extraordinarily broad customer base, requiring IES Infrastructure's service offerings in one capacity or another. IES Infrastructure has provided coordination and packaging for every type of project ranging from Level 1 Critical Life Safety Power, to Data Center Continuous, to Manually-Switched Standby packages. Our products and services help provide support for the following key markets and many other industries.

Manufacturing/ Industrial

- Automotive
- Chemical Processing
- Food Processing
- Glass
- Heavy Manufacturing
- Oil & Pipeline
- Mining
- Petrochemical
- Plastics & Rubber
- Pulp & Paper
- Wastewater

Public/ Government

- Aerospace
- Care Facilities
- Hospitals
- Medical Technology Centers
- Military
- Naval/Marine
- Universities
- Utilities

Power Generation /Distribution

- Data Centers
- Electric Utilities
- Fossil Fuel
- Hydro
- Nuclear
- Pump & Lift Stations
- Wind

Metal/Steel

- Metal Producing
- Metal Processing
- Scrap & Recycling
- Steel Foundries
- Steel Mills

Transportation

- Aviation
- DOT
- Light and Class 1 Rail

MOTORS GENERATORS ARMATURES

IES Infrastructure offers complete rewind, reconditioning, and remanufacturing for all makes and models of AC and DC motors and generators as well as diagnostics and field services including comprehensive preventive maintenance and 24/7 emergency service. Our in-house engineering staff provides performance verification and analysis, motor redesign, and UL re-rating. We also offer armatures that are new and complete, sold together with engineering, drawings, and stampings. Our goal is to solve your equipment problems – on time, to specification, and within budget.

Recondition, Rewind & Remanufacture

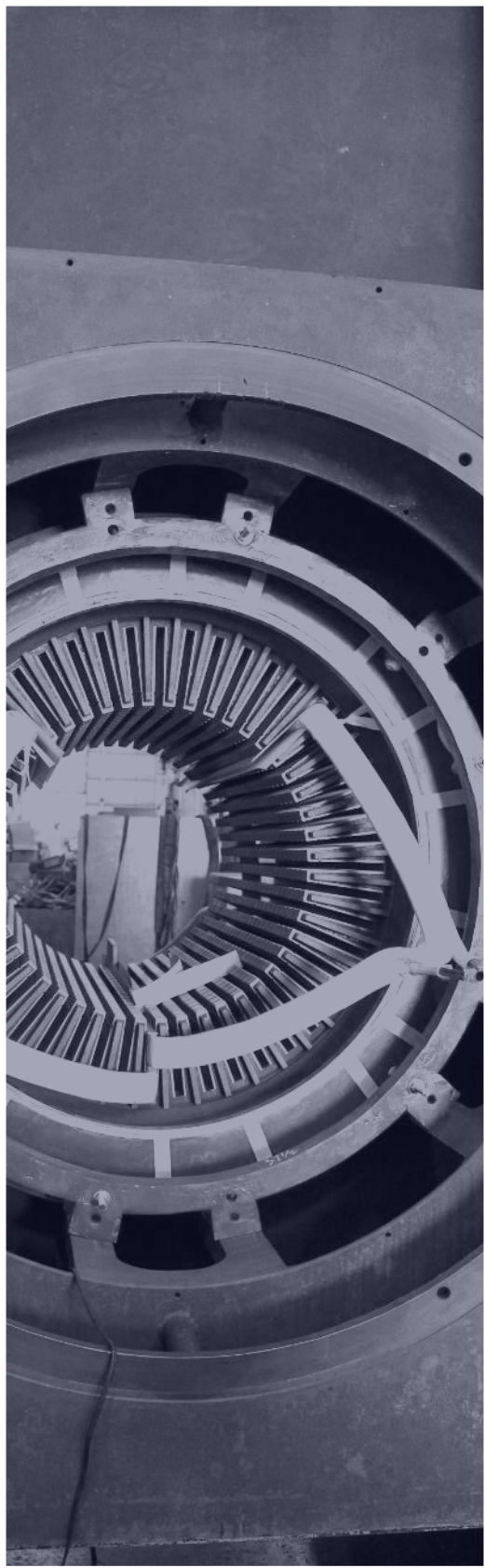
- 12' VPI
- ABB & GE & TMEIC authorized service provider
- AC motors 1/4 HP to 80,000 HP (13.8kV)
- Complete mechanical repair service
- DC motors and generators 1/4 HP to 10,000 HP (750V)
- Dynamic balancing to ANSI & ISO standards
- Full run test 12,500 HP @ 13,800 VAC
- UL listed explosion-proof motors

Motor Testing Capabilities

IES Infrastructure technicians test every motor at inspection, in progress, and at completion to maintain quality control at every major step. We ensure your motor complies with nameplate rating, and more importantly, your specifications. Some of our routine testing include high-potential ground tests, high-potential turn tests, dynamometer load tests, no-load tests, speed tests, balance tests, and high-potential voltage tests. We document and retain all test data and provide copies of the results per customer request.

Field Services

At IES Infrastructure, we know how downtime can affect our customers. Not only do we offer 24/7 emergency call out services, we are proactive in our approach in minimizing downtime for our customers through our preventive and predictive maintenance service offerings. Our field service technicians are trained in several service offerings including: equipment removal, installation, and commissioning; infrared thermal imaging; vibration analysis; oil analysis; ultrasonic examination; borescope inspections; laser shaft alignment; PdMA Motor Circuit Evaluation; and EMAX Electrical Testing.



CIRCUIT BREAKERS | PROTECTIVE RELAYS | TRANSFORMERS |



Transformers

IES Infrastructure is a transformer repair and remanufacturer service provider that has the advantage of being able to do comparative analysis and design on almost all manufacturers worldwide. We remanufacture transformers from 100KVA to 25,000 KVA (base rating), and up to 69KV. Our unique position allows us to perform reverse engineering to verify that the unit meets the stated nameplate data, and then offer design improvements.

Our transformer technicians are highly trained on various types of transformers including rectangular layer, circular layer, circular disc, circular helical, shell form design, unit substation transformers, distribution transformers, furnace transformers, and specialty transformers (rectifier, network, precipitator, and train).

Circuit Breaker Reconditioning

The useful life of aging circuit breakers can be extended and enhanced through our reconditioning process. This cost-effective process helps enhance coordination, improve reliability, and extend the life of the circuit breaker without buying new equipment. Our reconditioning includes:

- Trained and experienced technicians
- Trip unit upgrades for enhanced selectivity
- Affordable solutions for any maintenance budget
- IES Infrastructure factory warranty and extended warranty options

Protective Relay Panels

These panels can be custom designed by our engineering group, built to third party specifications, or both. This allows the end user flexibility in a cost-effective, high-quality solution to fit their needs.

Field Service Offerings

- Coolers, valves, fans, controls, wiring, and accessories replacement
- Electrical testing
 - Turns ratio, insulation resistance, winding resistance
 - Power factor
 - Full CT testing
- Failure investigation and repair
 - Lead repair
 - No load tap changer (NLTC) repair
 - Re-blocking
- Fluid Service
 - Oil dehydration, degasification, and reclamation
 - Vacuum dry-out & filling
- Load tap changers
 - Load tap changer (LTC) inspection, and maintenance
 - Load tap changer (LTC) replacement, and upgrade
- Oil testing and processing
- Pump rebuild and replacement
- Refurbishment, regasketing, and bushing replacement
- Turnkey services
 - Assembly, commissioning, and installation
 - Transformer relocation

ELECTRICAL DISTRIBUTION EQUIPMENT

BUS DUCT SYSTEMS | CABINETS | CONTROL SYSTEMS | SWITCHBOARDS | SWITCHGEAR

IES Infrastructure provides electrical distribution products and services for the industrial & utility power markets. We offer installation of equipment on a scheduled and emergency basis, as well as free consultations by our experienced engineers. We require our engineers to be licensed professional electrical engineers.

Our trained installation crews provide a trouble-free install that is completed in a timely manner. With all equipment that is provided, you will receive an accurate drawing package that is drawn using AutoCAD.

We repair motor control center (MCC) retrofits of all brands and styles that extend the life of most MCC 20 to 30 years without the expense of replacing the entire structure. Our retrofits include starter, circuit breakers, control power transformers, relays, and pilot devices. Our MCC's come assembled, wired, and tested, and are then test fitted into original MCC structure. Experienced engineers resolve design deficiencies and safety issues and test-fit every retrofitted unit before it leaves our facility.

ENGINEERING SERVICES

- Conceptual engineering packages
- Design of enclosures, control panels, relay panels, walk in control stations, and other equipment
- High potential testing of cables & equipment
- High voltage consultation
- On site electrical starter & breaker testing
- Plant electrical system studies
- Power factor correction capacitors
- Relay testing & setting
- Short circuit, relay coordination, and arc flash analysis
- Start up assistance for motor starters, breakers and relay panels



IES Infrastructure provides custom designed low voltage switchboards to meet specific dimensional and electrical requirements of any generator OEM manufacturer. These switchboards can be free-standing or alternator-mounted for ease of installation and use.

Our generator output switchboards can be constructed with any OEM brand of circuit breaker up to 5000 Amperes. Switchboards are designed for up to 600VAC and up to 100KAIC interrupting capacity. Paint colors can be standard ANSI 61 gray or any specified color required. Each switchboard is designed per UL891 standards.



IES Infrastructure is a global leader in non-segregated and segregated bus products. We use a proprietary extruded aluminum side sheet design to eliminate hardware penetrations and reduce the possibility of water intrusion.

We offer a full range of bus duct products from 600V through 38KV and ampacities to 6000A A/C and 24,000A D/C. Our bus designs are available with UL & CSA listings per IEEE C37.23 standards. Bus bars are available in copper or aluminum, epoxy insulated, and silver or tin plated. Bus systems and structural support systems can be offered with seismic and OSHPD certifications where required.

Generator Enclosures

Each custom enclosure is engineered to meet the customer specifications and project requirements. The exterior walls are constructed with an interlocking panel design and use an automotive grade wet-spray paint systems and has the ability to match almost any color. Every enclosure and base is surface-prepped and sprayed with a two-component epoxy primer/sealer. Enclosures are finished with a high gloss two-component aliphatic polyurethane top coat. Walk surfaces are finished with a slip-resistant, textured paint additive. Equipment doors are customized for easy access and man doors can be provided with removable transoms for easier removal and installation of large power equipment.

The interior of the custom enclosure is integrated using wireway or conduit per the customer requirements. The custom enclosures can be designed to include low-voltage or medium-voltage electrical equipment or protective relay panels, and/or designed as a sound attenuated generator enclosure. Site conditions are considered in the structural design criteria, as well as HVAC heating and cooling requirements.



CUSTOM MANUFACTURER



PDC HOUSES & PLENUMS

Our Advanced Systems service offerings include Power Distribution Centers (PDC's) or Electrical Equipment Houses (E-House), Skid-Mounted Systems, and exhaust plenums. Our team of engineers and electricians collaborate with your design team to install electrical or mechanical systems within your custom PDC. IES Infrastructure's engineers verify that all plans and specifications comply with applicable codes before commencing with production.

Every Power Distribution Center is customized to match your specifications and equipment. Customer supplied equipment is installed, connected, and tested at the factory prior to shipment. This allows you to streamline the approval and acceptance testing, and reduces on site installation time by providing a complete package integrated in an ISO 9001 factory.

IES Infrastructure provides custom exhaust plenums for sound attenuated diesel generator enclosure integrators. We design each exhaust plenum based on many site factors that include wind loading, seismic design category, exhaust height requirements, air-flow, and many others. Our exhaust plenums can be certified by a Professional Engineer (PE) and can be designed per specific standards such as SMACNA or others.

Plenum height can be designed up to 80' AFG and can be configured in single-wide or double-wide construction. IES Infrastructure's custom exhaust plenums match the generator enclosure paint specifications and color. Our design also allows the ability to add to the height of each plenum for future site requirements. The plenums can be used with most major generator enclosure integrator designs and generator OEM manufacturers.

ELECTRICAL EQUIPMENT:

IES Infrastructure can offer a multitude of options for electrical equipment integration and control including but not limited to:

- AC MV Switchgear, 5kV - 38kV
- AC LV Switchgear, 480V - 600V
- 480V - 5kV Motor Control Centers
- Protective Relay Panels
- Unit Substations
- DC Switchgear, 250 VDC - 1600 VDC
- Power Rectifiers
- Battery Systems
- UPS Equipment
- Panel boards & Switchboards
- SCADA Equipment



Magnetech is your source for lifting magnet sales, repair, and rewind for the metal and scrap industries, railroad yards, and shipyards. We supply a wide range of sizes and configurations to meet your needs. Our broad experience coupled with its knowledge of best practices in the industry are representative of the quality, value, and experience our company offers.

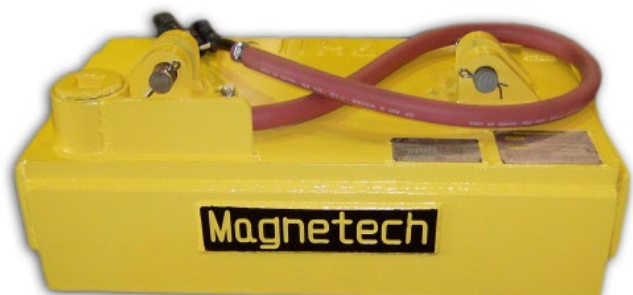
Our Lifting Magnet Services

New Magnetech brand lifting magnets & generators – scrap magnets, rectangular magnets, and circular magnets for scrap yards, foundries, steel mills, slag reclamation, warehouses, ship yards and railroad yards, and demolition industry

- Accessories, including hooks, chains, connectors, controls, and separators
- Custom designed & manufactured spreader beams
- On-site lifting magnet & accessory system installation and field service
- Complete lifting magnet rewind & rebuild services for all brands & types
- Load test certification
- MagneTrac® Asset Management
- Authorized Hubbell Control and EDP Conception representative
- Lifting Magnet operation awareness seminars

Our Lifting Magnet Sales

All Magnetech magnets with patented core are designed to 75% duty cycle and constructed with class H insulation throughout coil. Steel construction maximizes lift-to-weight ratio without sacrificing strength and durability.



Offerings

RAIL



Magnetech Railroad Services Division offers its customers the highest level of quality, cost savings, and on-time delivery. Magnetech offers “Unit Exchange” (UTEX) and “Repair & Return” (R&R) of all major electrical rotating components for GE and EMD locomotives including auxiliary rotating equipment, main generators, main alternators, and traction motors. Locomotive components will be repaired, upgraded, or completely remanufactured to the original manufacturer’s specifications.

AC/DC Electric Motor & Generator Services

- All manufacturers
- Class 1, Light Rail & transit
- EMD and GE Motors
- Repair and Rewind

Auxiliary Rotating & Cooling Equipment

Rebuild and Unit Exchange available for the following:

- AC and DC Auxiliary Generators
- Complete Stator/Rotor Rewinds, Stator Core Iron Repair, and/or Renewals on EMD/GE auxiliary cooling equipment
- Cooling Fans
- Dynamic Brake Grid Blowers
- Inertial Discharge Blower Motors
- Traction Motor Blowers

Heavy Rail Remanufacturing

- Complete Stator/Rotor Rewinds, Stator Core Iron Repair, and/or Renewals on EMD/GE Generators and Alternators
- EMD AR10/11/15/20 & TA 17/20/22 Alternators
- EMD D12/22/32 Main Generators
- GE 5GMG 186/194/197 Main Alternators
- New manufacture of Auxiliary Stator and Rotor Assemblies
- New manufacture of Diode Assemblies
- Rebuilds of Utex Cooling Fans, Auxiliary Generators,
- Dynamic Brake Grid Blowers & Inertial Air Motors
- Sales and Remanufacturing of ALCO Main Alternators and Generators

Lifting Magnet Services

Our rail line of magnets are designed for use in the removal and clean-up of track. We supply a wide range of sizes and configurations to meet your needs. Our broad experience with all types and brands of equipment coupled with knowledge of best practices in your industry provides your best assurance of quality and value. Suitable for Tie Plate, Rail, Rail Spikes, Rail Wheels, Slabs, Plate, Rebar, Scrap, and/or Spreader Beam Application.





OUR FIELD SERVICE TEAM ARE BOTH CLASSROOM AND FIELD TRAINED TO MANAGE PROJECTS WITH AN EFFICIENT, ECONOMICAL, & COMMON-SENSE APPROACH.

IES Infrastructure provides a full range of value-added Field Services to assure that your project is designed, manufactured, delivered, and installed to your exact specifications all while exceeding your expectations. Almost all of our in-shop services can be provided on site at our customer's location. Our field service technicians provide field measurements, installation advisory, field testing and inspections, commissioning, and spare parts. IES Infrastructure provides an instant link to the factory and engineering should any unexpected questions or problems be encountered while in the field.

PRE-BID CONSULTATION:

- Evaluate retrofit projects
- Obtain equipment details for interfacing purposes
- Provide site takeoffs to prepare quotations
- Conduct site walk-downs
- Suggest bus routings
- Verify field measurements for design

POST-AWARD OPTIONS:

- Arc flash studies
- Full turn-key construction & installation service
- Field installation advisory service
- Inventory control
- Review of installation drawings
- Training of personnel on safety, crate & equipment markings, and maintenance
- Field testing and commissioning
- Startup advisory service
- Inspection
- Extended warranty options
- Recommended spare parts
- Short-circuit & coordination studies
- Power quality studies

ENGINEERING SERVICES:

- Conceptual engineering packages
- Electrical system studies
- High voltage consultation
- Operation and maintenance training
- On site electrical starter & breaker testing
- Relay testing and setting
- Short circuit, relay coordination, and arc flash analysis
- Start up assistance for motor starters, breakers, and relay panels

TRANSFORMER SERVICES:

- Bushing replacement
- Field refurbishment
- Fluid service
- Internal inspection & repair
- Load tap changer inspection & maintenance
- Mechanical services
- No load tap changer, repair, & re-blocking
- Oil reclamation
- Oil dehydration
- Oil degasification
- Vacuum filling & dry-out

Our Company
LOCATIONS



**Magnetech
Industrial Services,
Inc.**

701 Bill Myles Dr. W.
Saraland, AL 36571
(251) 675-0855



**Plant Power and
Control Systems,
LLC.**

179 Airpark Industrial Rd.
Alabaster, AL 35007
(205) 663-4433



**Southern Industrial
Sales and Service,
Inc.**

5277 Chumar Drive
Columbus, GA 31904
(866) 805-9205



**Calumet Armature &
Electric, LLC.**

1050 West 134th Street
Riverdale, IL 60827
(708) 841-6880



**Magnetech
Industrial Services,
Inc.**

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Hammond, IN 46320
(219) 937-0100



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(330) 830-3500




**Magnetech
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Boardman, OH 44512
(330) 758-0941



Technibus, Inc.

1501 Raff Road SW
Canton, OH 44710
(330) 479-4202



**Freeman
Enclosure
Systems, LLC.**

4160 Half Acre Road
Batavia, OH 45103
(877) 441-8556



**Wedlake
Fabricating, Inc.**

3989 N Osage Dr
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**Magnetech
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