

Authorized distributor of electric motors, variable frequency drives, motor control products and more.



TOSHIBA

Nidec

TECO **Westinghouse**

MEG **EATON**

MEC **BROOK CROMPTON**
Keeping Industry Turning

hammond
POWER SOLUTIONS

INNOMOTICS **TATUNG**

LEESON **Multilin**

mercen

SIEMENS

marathon
Motors

ABB *Danfoss*

Littelfuse
Expertise Applied | Answers Delivered

MOTORS

- Warehouse Inventory
- Fractional to 600HP
- Verticals
- Horizontals
- Quarry and Severe Duty
- E-Pact and Premium
- Efficiency
- NEMA
- IEC
- Gear Motors
- Motor Parts

MOTOR PROTECTION PRODUCTS

- GE Multilin
- Ferraz Shawmut (now Mersen) Fuses
- Eaton

AUTHORIZED SYSTEM INTEGRATOR/OEM

- Eaton Controls/Switchgear
- ABB Controls/Switchgear
- Siemens Control Products
- GE Control Products

VARIABLE FREQUENCY DRIVE & SOFT START APPLICATIONS

- Toshiba
- Teco Westinghouse
- Eaton
- Custom Built Starters
- Part Winding
- Reduced Voltage
- Solid State

INSTRUMENTATION

- Toshiba Electromagnetic Flowmeters
- Microwave Density (Consistency) Analyzers



1881 E. University Dr.,
Phoenix AZ 85034
602-437-3015



Services

50,000 Square foot EASA accredited repair and service facility



- Clean Room Winding Operation
- 96" Diameter, 96" Deep VPI Tank
- Industrial Curing and Burn-Off Ovens
- Superior Crane Capacity - 30 Ton Main Crane
- Drive-in and Dock High Receiving and Shipping Capabilities

MOTOR REPAIR & MECHANICAL MAINTENANCE SERVICES

- **AC and DC Motor Repair**
 - Basic and Bearing
 - Complete Stator Rewinds
 - Lamination Repair and Replacement
 - Rotor Repair
- **AC Generators**
- **Dynamic Balancing-**
 - State of the Art Schenck
 - Low Speed Balancer
- **Electric Brakes**
- **Gear Reducers**
- **Hermetic Stator Repairs**
- **Machine Shop Services**
- **Pumps-Any Manufacturer:**
 - Horizontal
 - Verticals
 - Submersible
 - Blowers
- **Thermography**
- **Traction Motors**
- **Transformer Repairs**
 - Pad and Pole Mount
- **UL Certified Repairs**
 - No. E85035
- **Vibration Analysis**
- **Welding**

ENGINEERING DESIGN SERVICES

- Design/Build - Turnkey Electrical Projects
- New Installations (Design, Plan and Implement)
- Complete Power Distributions and
- Control System Retrofits (Design, Plan and Implement)
- Industrial Control Division
- PE/EE Services
- Pre-Contract Design and Budget Review
- Value Engineering

SUPERIOR MATERIALS & PROCESS

- Koyo Bearing Certified Repair Facility and Mechanics
- Class H Insulation
- End Turn Taping
- Phase Paper
- Quad Wire
- VPI Epoxy Process
- Dip and Bake

STATE OF THE ART TEST LABORATORY

- 1500 KVA Test Stand with Voltage Availability to 13.8KV
- 700 Volt DC Testing Capabilities
- AC Output Phase Balance Compensation +/- 1%
- Optical Speed Measurement
- 8 Channel Temperature Measurement and Display
- Superior Data Collection and Reporting Tools
- 2100 HP Water-Brake Dynamometer

OUTSIDE SERVICES

- Full Service Electrical Contractor
- TECO-Westinghouse-Preferred Service Provider
- Toshiba Factory Certified Medium Voltage Start-up
- OSHA and MSHA Certified & Trained Technicians
- Vibration Analysis
- Dynamic Balancing
- Laser Alignment
- Thermography
- Field Repairs and Troubleshooting
- General Maintenance
- Predictive and Preventative Maintenance

CUSTOM CONTROL MANUFACTURING

- UL 508A Certified Fabrication Plant (No. E119885)
- Complete Turnkey Control Systems
- Fully Custom Equipped E-Houses
- Portable/Skid Mounted Substations
- Motor Control Centers
- High and Low Voltage Switchgear
- System Integration Facility
- Complete PLC and SCADA System (Design, Plan, Program and Implement)
- Custom VFD Controls Integration

Mechanical Services



FIELD SERVICES

- Plant maintenance support, services and relocation
- Millwright services
- Process pipe design, fabrication and installation
- Mining support services
 - Crush and Convey
 - Mill maintenance
 - Repair
 - Supplemental Labor (outages)
- Machinery guarding design, build and installation
- Heavy haul, transport and heavy lift
- Crane and technical rigging
- Machinery maintenance, repair and rebuild
- Municipality and waste water applications
- AWWA and API Tank Repairs
- Large and small project management
- Forced and scheduled outage
- Emergency Service
- OSHA/MSHA trained professionals



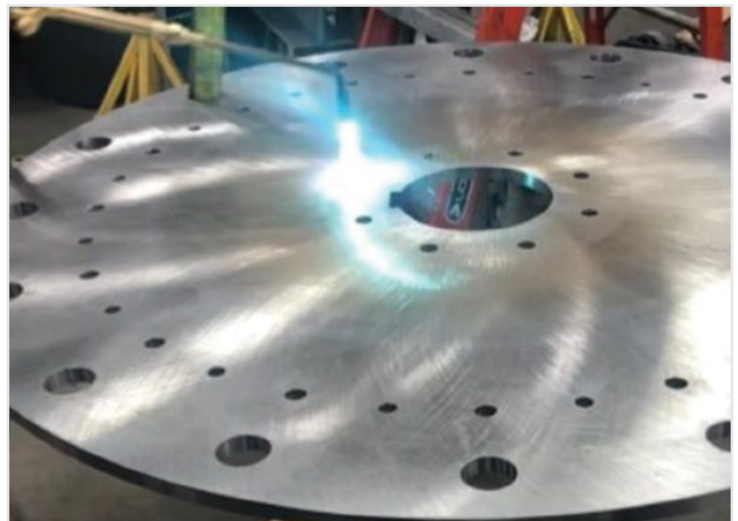
ROTATIONAL MACHINERY HEALTH

- Vibration Analysis - Cat III and Cat II Certified Technicians
- Dynamic Field Balancing
- Laser Alignment
- Predictive and Preventative Maintenance
- Third Party Commissioning and Acceptance Testing
- Electrical and Mechanical Thermography



WELDING AND FABRICATION

- AWS, ASME, API and AWWA Qualifications
- SMAW, GTAW and GMAW Processes
- Stainless steel, aluminum, carbon and specialty alloys
- Repair, shop and mobile services
- General Shop and Field Fabrication Services
- Process pipe design, build and installation
- Structural design, build, repair, fabrication and installation
- Saw, bend, shear, roll and punch all materials
- Full machine shop capabilities
- Third party NDE and heat treat coordination



Controls

Authorized distributor of electric motors, variable frequency drives, motor control products and more



- Custom PLC buildouts
- VFD Upfitting to meet Customer Standards (adding controls)
- MCC customization to meeting Engineer specs
- Custom Control Panels and Starters

CAPABILITIES

- Distributor and warranty repair facility for Siemens, Cutler Hammer Toshiba Controls (VFD's and PLC's)
- Control system integration and design modifications
- City of Phoenix 17260 Compliant CAD design and support.
- System Integration, Motor Control Centers, Variable Frequency Drives, High Voltage Switchgear, PLC's and Vacuum Contractors
- Full service installations and start-ups
- Functional testing, programming and repair of process equipment



CUSTOM CONTROL MANUFACTURING

- UL 508A Certified Fabrication Plant (No. E119885)
- Complete Turn-Key Control Systems and Components
- Fully Custom Equipped E-Houses
- Portable/Skid Mounted Substations
- Motor Control Centers
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- System Integration Facility
- Complete PLC and SCADA System (Design, Plan, Program and Implement)
- Custom VFD Controls Integration



OTC offers full service panel fabrication and custom motor controls for projects of all sizes. We are a UL 508A certified fabrication plant and we have over 15,000 square feet of fabrication space.

Our experienced wiremen and journeymen follow strict quality assurance standards in fabrication and wiring electrical panels. We have rigid fabrication guidelines and testing procedures to guarantee quality and on-time delivery.



Repair Services



MOTOR AND GENERATOR

- AC/DC Motor & Generator Rewinds and Repairs (fractional HP up to 10,000HP)
- Class H Materials
- Inverter Duty Copper Magnet Wire (Quad Enamel)
- Stator and Rotor Core Loss Testing
- Wound Rotors and Armatures
- Rotor Rebar
- Redesign of Electric Motors through EASA affiliation
- Stator Lamination Repair and Replacement
- Vacuum Pressure Impregnation system using Epoxylite 478
- Polyester 1105 Resin



HORIZONTAL, VERTICAL, SUBMERSIBLE MOTORS AND BLOWERS

- VSS, VHS, TEFC, ODP
- Flygt, Fairbanks Morse, Meyers, Barnes, Hydromatic
- Hoffman Lamson and Spencer Blowers
- Traction Motor Repair
- No Load Testing up to 4160 Volts
- Underwriters Lab Recertification of Explosion Proof Motors
- Full Documentation of Repairs with Reports Upon Request
- Stock of Refurbished Motors in an Indoor Warehouse

TRANSFORMER REPAIR AND PREVENTATIVE MAINTENANCE

- Oil Analysis with Detailed Report
- Rewind and Repair Capabilities for all types of Transformers (Single Phase, 3 Phase, Dry Type, Oil Filled and Variable Voltage)
- On-site and In-house Testing Capabilities
- On-site Preventative Maintenance
- Stock of Refurbished Transformers

MACHINE SHOP

- Fully Staffed Machine Shop
- Laser Alignment Systems
- Computer Aided Mechanical Systems
- Lathes up to 45" Swing Capacity
- Milling Machines
- Turning and Undercutting of Armatures
- New Shaft Fabrication
- Key Way Cutting
- MIG, TIG, and ARC Welding
- Coating of Bearing Surfaces
- Dynamic Balancing

EMERGENCY MOTOR REPAIR

- Apparatus Removal and Installation
- On-site Repairs
- Troubleshooting



24 hours/7 days a week

602-437-3015