

HISTORY, MANUFACTURERS SERVICED, CONTACT

THE HISTORY OF TECHNICAL FIELD SERVICES (TFS)

TAW Custom Equipment developed Technical Field Services in the mid-1990s, to test CE-built switchgear before it was released to customers. At the time, the group, known as TFS, also helped with equipment field installations.

TFS quickly evolved from installing and servicing TAW switchgear to working on all of our customers' switchgear. By 1999, our TFS team had become so adept and successful, they split from the Custom Equipment division, and moved to their own space in Lakeland.

As demand for services continued to grow within the next year, field technicians were being pulled out of Tampa to work in Lakeland, and the switchgear field service division completely moved out of CE in Tampa, and into the Lakeland facility, where there was a fully functional team to assist with both mechanical and electrical needs.

Their last move, to bigger and better facilities, was to Swindell Road, where TFS resides today.

FIELD SERVICE CAPABILITIES

Electrical Manufactures Serviced:

- Transformers – ABB, Areva, GE, GE (Prolec), HICO, McGraw/Edison, Mitsubishi, Niagara, Reinhausen, RTE, Siemens, Sunbelt, Powell, WEG, Westinghouse, etc.
- Switchgear/Motor Control Centers – ABB, Eaton, GE, Powell, Schneider Electric, Siemens, etc.
- Breakers/Contactors – ABB, Eaton, GE, Powell, Schneider Electric, Siemens, Toshiba, Westinghouse, etc.
- Relays – ABB/ITE/BBC, Basler, Cutler Hammer/Westinghouse, Eaton, GE, Multilin, SEL, Schneider Electric, Square D, Siemens, etc.
- Variable Frequency Drives – ABB, Allen Bradley, Danfoss, Toshiba, Yaskawa, etc.

Mechanical Manufactures Serviced:

- Motors – ABB/Baldor, GE, Hitachi, US Motors/Nidec, Siemens, TECO Westinghouse, Toshiba, WEG, etc
- Pumps – American Marsh, Foster-Wheeler, Godwin, Peerless, etc

24 HOUR SERVICE - 7 DAYS A WEEK

**FOR MORE INFORMATION
866-660-4940**

**FAX 863-683-9806 • TAWINC.COM
LAKELAND_QUOTES@TAWINC.COM**

TFSBOOK



Your Ultimate Power Partner.

TECHNICAL FIELD SERVICES HAS GOT YOU COVERED

Predict, Prevent, Maintain



Our team will assess your systems and components and identify issues before they arise to help prevent unplanned outages. Also, our electrical/mechanical field services include emergency 24/7 support across the Southeastern United States, the Caribbean Central, and South America. So, if something isn't working, our highly trained and skilled technicians will be there to restore your operation to normal as quickly as possible. You can trust in TAW®, we've helped businesses like yours for nearly 100 years.

ELECTRICAL FIELD SERVICES



MECHANICAL FIELD SERVICES

Our high-quality, industry-leading team follows established standards of NETA, ANSI, and NFPA, including IEEE electrical testing. Our electrical field services are available for a wide array of systems, including transformers, protection relays, switchgear/motor control centers, breakers/contactors, VFDs and battery systems. Ideally, our focus with your team will begin with predictive maintenance to trend the health of your systems and find and diagnose issues before they impact your business. TAW® can monitor your systems, perform diagnostic testing, report on the results, troubleshoot issues, and help extend the life of the equipment.

FIELD SERVICE PROGRAM OFFERINGS

- Transformer – Installation, Testing, Repairs, Recondition, Upgrades, Oil Analysis/Processing, De-Gas/De-Hydrate
- Switches – Testing, Recondition, Upgrades
- Switchgear/Motor Control Center – Installation, Testing, Repairs, Recondition, Retrofits, Upgrades/Modifications
- Breakers/Contactors – Installation, Testing, Repairs, Recondition, Retrofits, Upgrades (Trip Units, UV, etc.) - Air, Oil, Vacuum and SF6
- Protective Relay - Testing, Calibration, Repair, Upgrade, Programming
- Variable Frequency Drives – Install, Testing, Startup, Troubleshooting
- Battery/Charging Systems – Testing, Maintenance, Replacement
- Start-up and Commissioning
- Preventative/Condition-based Maintenance
 - Master Service Agreements
- Thermography (IR) - Inspection/Analysis/Reporting
- Testing and inspection for low and medium voltage equipment
- Cable Termination and Determination



FIELD SERVICE CAPABILITIES

Transformers:

- Excitation Current
- Impedance
- Insulation Power Factor
- Partial Discharge
- Sweep Frequency Analysis
- Gas/Oil Analysis
- Impulse
- Insulation/Winding Resistance
- Phase/Polarity Relation
- Turns Ratio

Switchgear/MCC:

- AC / DC Hi-Pot
- Insulation Resistance Test
- Power Factor
- Ratio/Excitation

Breakers/Contactors:

- Contact Resistance
- Insulation Resistance
- Secondary/Primary Injection
- Timing/Travel Analysis

Battery/Charging System:

- Discharge
- Resistance

Misc:

- Hi-Pot (Cable)
- Partial Discharge (Cable)
- Very Low Frequency (VLF)



POWER STUDIES & ENGINEERING SERVICES

- Arc Flash Studies – SKM
- Control Systems Engineering
- Coordination Studies
- Load Capabilities
- PE Signed/Sealed
- Power Quality Studies
- Short Circuit Studies
- System Drawings (AutoCAD)



TAW® is an industry leader when it comes to preventative maintenance for every type of rotating equipment, including motors, pumps, fans, blowers, and mills. Our mechanical field services include predictive maintenance programs to determine the condition of the critical parts of your rotating equipment. This includes inspection and service of bearings, lubrication, alignment, base, and pipe stress to prevent downtime and extending the life of your machines.

All our testing programs are designed to identify potential areas for machinery failure. We start with scheduled data collection at pre-determined intervals – monthly, quarterly, or other set times. Then we analyze the data and provide your team with detailed reports and recommendations on the status of the wear on your machinery and how it is trending to extend its lifetime usefulness and avoid unscheduled downtime ultimately.

FIELD SERVICE PROGRAM OFFERINGS

- Vibration - Analysis/Monitoring/Report
 - CSI/Commtest - Vibration Platform
- Laser/Thermal Alignment – Motor/Pumps
- Thermography (IR) - Inspection/Analysis/Reporting
- Motor Current Eval. (MCE) Motor Testing – PDMA and Baker
- Vertical and Horizontal Motors/Pumps - Rigging, Removal, Installation
- Conditioned Base Monitoring
- Precision Maintenance
- Preventative Maintenance
 - Master Service Agreements
- Wear Oil – Analysis/Report
- Ultrasonic Emissions (UE)
- Relubrication
- Motor Termination/Determinations
- Energy Conservation
- Onsite customer training
- Centrifugal and Radial Blowers – Repairs/Replace/Alignment/Balance
- Boiler Feedwater Pumps - Repairs/Replace/Alignment
- Belt/Pulley – Alignment/Repair/Replacement
- Cooling Tower Motor/Gearbox – Repair/Replace/Alignment



FIELD SERVICE CAPABILITIES

- Advanced Diagnostics
- Dynamic Balancing
- Flow Rate Analysis
- Gear Alignment
- Insulation Resistance
- Mechanical Seal Replacement
- Natural Frequency Testing/Modal Analysis
- Operation Deflection Shape (ODS)
- Rotor Bar
- Ultrasonic Leak Detection
- Ultrasonic Testing – Arcing/Tracking/Corona

