



3-D SERVICE
REPAIR • SERVICE • SUPPLY

**Adding a New Dimension to
Industrial Service and Repair**



**Bernie DeWees, President
3-D Services, Ltd.**

Thank you for your interest in 3-D Services.

3-D Service earned a reputation for excellence – not just for its highly-regarded industrial equipment repair and field service capabilities – but our innovative Total Motor Management programs as well. These programs have proven highly successful in reducing breakdowns and repair costs, as well as minimizing spares inventories for several leading manufacturing companies. It is our intention to build on this reputation to become the industry's premier service provider.

You will be happy to know that most of the people who worked very hard to build our reputation continue to be a vital part of 3-D Service. They are highly experienced in nearly all facets of industrial service and repair and use the best tools to meet customer needs. I am very grateful and proud to have their continued support as we begin this new era.

As president of 3-D Service, I am committed to operating this business with the values of exceptional customer service, integrity, comprehensive repair and service capabilities, high quality, and competitive pricing. We are working every day to do the things necessary to increase the value we can offer your company. New capabilities and programs are being developed to provide you with the best industrial equipment repair and service value you will find anywhere.

One thing that won't change is our total dedication to meeting your needs – to get you what you need, when you need it, with the quality you require, every time.

The buck stops here. If you have any questions or comments about 3-D Service, or if you have a project for us to quote, please do not hesitate to contact me.

Thank you for your past support and we look forward to establishing a long, mutually beneficial relationship with your company.

Regards,

Bernie DeWees, President
3-D Service, Ltd.



Equipment Repair and Remanufacturing – Broad Capabilities for Total Support

We offer comprehensive service for all varieties and vintages of rotating electrical and mechanical equipment. Whether you just need your equipment repaired to like new condition, or remanufactured for better than new performance, we offer total support.

Electrical Products

- AC Motors to 80,000 HP (13.8 kV)
- DC Motors & Generators to 10,000 HP (750 V)
- Synchronous Motors
- Wound Rotor and Mill Type Motors
- Submersible Motors
- Drives and Drive Systems

Mechanical Products

- Gearbox Repair & Remanufacturing
- Pumps, Compressors & Blower Assemblies
- Shaft Assemblies & Rolls
- Brake Assemblies
- Bearing Rebabbing

Capabilities

- Complete Rewind, Reconditioning & Remanufacturing
- VPI Winding to 12' Diameter
- Dynamic Balancing to ANSI and ISO Specifications
- Dynamometer Load Testing
- Performance Verification Testing Services to 25,000 HP (13 kV)
- Complete Machine Shop Capabilities
- 24/7 Emergency Service





Specialty Repair Services – Total Support for Your Needs

In addition to motor and generator service, we offer the expertise to repair a wide variety of specialized equipment to like new condition.

- Hydroelectric Turbines & Generators
- Steam or Combustion Turbines & Generators
- Class I Rail Main Generators, Alternators & Auxiliary Equipment
- Light Rail Traction Motors/Alternators
- Navy and Marine Motors
- Nuclear Reactor Coolant Pump Motors
- UL® Recertification
- Electromagnetic Stirring Coil Units
- Overhead Cranes

Preventive Maintenance Technologies – On-site Service for Optimum Equipment Service Life

We offer a selection of on-site services to keep your equipment in prime operating condition. Our laser shaft alignment for example, ensures motor and driven equipment shafts are properly aligned so bearings on both pieces of equipment last longer.

- Laser Shaft Alignment
- On-Site Commutator Turning & Undercutting
- Turnkey Removal & Reinstallation Services
- Scheduled Outage Service & Troubleshooting
- DC Motor Brush Wear Analysis
- DC Motor Brush Maintenance Programs
- Motor Commissioning Services
- Motor Cleaning & Lubrication Programs
- Drive System Repairs and Upgrades
- Contract Maintenance Programs

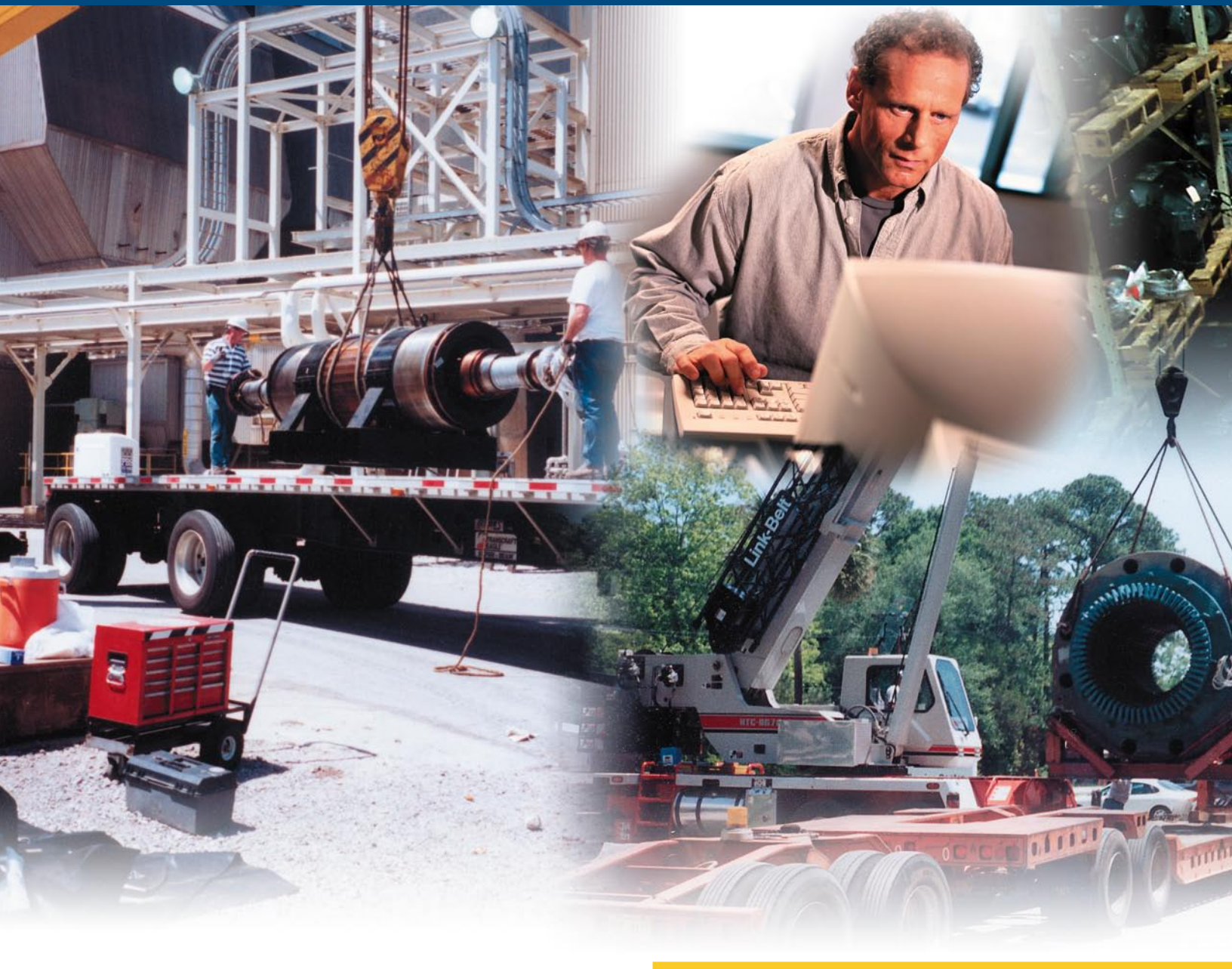




Predictive Maintenance Services – A Look into the Future Health of Your Equipment

Our predictive maintenance services can determine the condition of your equipment without taking it out of service. By regularly monitoring your equipment's performance over time, combined with contemporary software technology, we use the data we record and trend equipment service life – looking into what the future holds.

- Vibration Spectrum Analysis and Trending
- Thermographic Imaging & Analysis
- Tribology & Oil Particle Analysis and Trending
- Motor Circuit Evaluation & Analysis
- Ultrasonic Testing



Total Motor Management Performance Enhancement Programs – Maximizing Your Assets for Lower Operating Costs

3-D Service can help you achieve operating excellence by deploying a wide selection of value-added Total Motor Management, (TMM) services – each custom-tailored to your company's needs. For example, we can conduct an extensive survey of your company's equipment and production needs – in one plant or several. Then, we can provide recommendations to: lower and properly maintain spare parts inventories, lower energy usage, reduce equipment repair and purchase costs, and ensure production uptime and operating efficiency. And unlike a consultant, we can implement these recommendations for you – taking responsibility for the entire effort. These services and more are available for better bottom line results:

- Motor Management/Performance Guarantee
- Equipment Identification Surveys & Management
- Inventory Consolidation & Spares Management
- Storage/Warehouse Management
- Warranty Tracking
- Historical Database Management
- Repair Standards Development
- Root Cause Failure Analysis & Corrective Action Reporting
- Performance Enhancement/Needs Assessments





Motor Engineering & Diagnostic Services – Professional Support to Maximize Productivity

As rotating equipment specialists, we offer a wide selection of motor and generator engineering services to help you lower operating and maintenance costs; troubleshoot and correct problems; upgrade equipment to meet new production demands; justify, evaluate, design and install new equipment and more.

- Engineering Design & Equipment Re-rating Services
- Root Cause Failure Analysis
- Performance Verification Testing & Analysis
- Equipment Surveys & Needs Assessments
- Motor Modifications/UL[®] Re-rating
- Power System Studies
- Consulting Engineering & Design Service
- CAD Engineering/Documentation Services
- Energy Efficiency Studies

Service & Support for Operational Excellence

Our job is to help you do your job better. 3-D Service offers the resources to help you:

- Lower maintenance and repair costs
- Reduce downtime and improve productivity
- Upgrade equipment to meet new demands
- Increase operating efficiency
- Achieve a better return on assets

We Speak Your Language

With broad experience in servicing equipment in virtually every industry, we understand your company's particular demands and know the equipment and processes you use. This in-depth knowledge is available to help you maximize productivity and efficiency.

Service Expertise on Virtually All Brands of Equipment

We are very experienced in servicing equipment from manufacturers including General Electric, U.S. Electric, Reliance Electric, ABB, MagneTek, Westinghouse, Emerson, Siemens, Baldor and many more.

Commitment to Quality and Service

Throughout our company we are dedicated to providing quality you can trust. This is why we have highly-trained personnel who participate in these on-going quality programs and certifications:

- ISO 9001 Certification
- UL® Certified Service



ISO9001

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