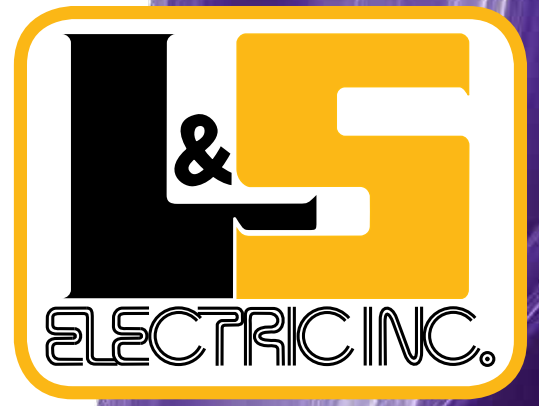


Pump Rebuilding



Dedicated People, Quality
Products, and Above All, Service

PUMP REBUILDING SERVICES

L&S Electric has more than 40 years of pump rebuilding expertise. Your other machining needs are met with our in-house machine shops and motor repair capabilities. Because our services are local, we can rebuild in days—not weeks. Our services are unmatched in the industry.

We Service the Following Pump Types:

- Horizontal
- Turbine, short set
- Centrifugal sludge
- Vertical
- Propeller
- Submersible
- Split case
- In-line
- Self priming
- Sewage
- Wastewater
- Motor mounted
- Vacuum

Our Complete Services Include the Following:

- Pickup and delivery of repaired and rebuilt equipment
- Thorough inspection before repair
- New L&S warranty for rebuilt equipment
- Comprehensive, modern repair facilities that provide a wide variety of services, such as boring, machine sleeves, metal spraying, and epoxy coating
- Component part rebuilding and replacement
- Impeller and/or rotor balancing
- Available services after repair to maintain your equipment, including reliability and power services
- Emergency service 24 hours a day, every day of the year

We Also Service the Following:

- Centrifugal blowers
- Gear reducers
- Gear motors
- Aerators and mixers
- Vertical hollow shaft motors
- Generators
- Gearboxes
- AC/DC drives and motors



REPLACEMENT PUMPS AND COMPONENT PARTS

L&S Electric provides complete lines of replacement parts to fit most municipal sewage and water pumps, including: Fairbanks Morse, Allis Chalmers, Aurora, Chicago, Crane Deming, De Laval, Morris, Smith and Loveless, Flowserve (Worthington/IDP) Yeomans.

We provide a complete range of high-quality replacement pumps and replacement parts for Allis Chalmers NSW and NSY series sewage pumps as well as Fairbanks Morse, water and wastewater pumps.

Services

- Impellers, volutes, suction covers, backheads, adapters, wear rings, shafts, sleeves, frames, glands, bearing housings, etc.
- Complete rotating assemblies including everything except volute, suction cover, base, and elbow to fit all the above makes
- Dry pit submersibles rotating assemblies to fit most non-clog sewage pumps
- Complete replacement non-clog sewage pumps, directly interchangeable with all Fairbanks Morse and Allis Chalmers models

Advantages

- Drop in replacement in many cases
- Conversion of existing vertical flexible drive-shaft driven pump units to “close-coupled” if station vibration problems exist
- Modernization of old or obsolete models with current day parts and assembly conversions
- Computer-generated impeller designs and re-designs to suit specific application and performance problems
- Design upgrades and enhancements to improve mechanical reliability
- Complete pump repairs and overhauls

ROTATING APPARATUS REPAIR SERVICES

L&S Electric offers comprehensive repair capabilities regardless of brand. Our network of service centers features complete diagnostic and testing capabilities for almost any type of rotating equipment.

Repair and Remanufacturing Capabilities

- AC and DC motors and generators up to 15,000 HP
- Wound rotor, synchronous, and submersible motors
- Gearboxes and blowers
- Municipal and industrial pumps
- Rail equipment
 - Traction Motors
 - Main Generators and Alternators
 - Truck and Combo Repairs
 - Auxiliary Equipment
- Hydroelectric generators
- Crane and shaker equipment
- Complete rewind, reconditioning, and remanufacturing
- Large VPI systems with multiple resin options
- Insulation systems include Class F and Class H
- All NEMA frame motors rewound with Class H insulation and inverter grade wire.
- Motor re-engineering capabilities
- Advanced non-destructive motor circuit testing
- On-site services
 - Equipment removal, repair, and new installations
 - Comprehensive motor services
 - Rigging and crane services
- 24/7 emergency service
- Turnkey removal and installation services



Facilities

- More than 250,000 square feet of operating space
- Repair centers located throughout the upper Midwest
- 40-, 20-, 10-, and 5-ton traveling bridge cranes
- Complete machining services
- Computer assisted load testing capabilities
- Videoconferencing capability

Certifications and Listings

- ISO 9001 certified repair facilities
- Minneapolis, Rothschild and Sturtevant facilities are UL®-listed to rebuild electric motors intended for hazardous applications
- Appleton Rail Truck Repair facility is AAR M-1003 Certified

PREDICTIVE MAINTENANCE

Vibration Analysis and Special Analyses Programs

With complete Predictive Maintenance Programs that are customized to your specific needs, we can diagnose defects in rotating equipment in their early stages before catastrophic failure or unscheduled downtime occurs.

Laser Vibrometer Readings

Experienced L&S technicians use advanced laser technology to detect problems in hard to reach areas. We are able to gather accurate data from as far away as 660 feet, reducing the number of inaccessible bearings.

Operation Deflection Shape Studies

While a machine is operating, our equipment creates a 3-D animation of the structural movements, allowing us to accurately detect potential stress in rotating and driven equipment, bases, and motor frames.

Motor Current Signature Analysis

Detecting rotor problems in AC induction motors can prevent unscheduled downtime before valuable production time is lost.

Roll Roundness Profile Analysis

By measuring the relative motion between press rolls and detecting irregularities, roll roundness profile analysis helps ensure that your products achieve a consistent quality.

Sound Level Analysis

Quantifying the decibel levels in noisy work areas ensures that accurate safety measures can be taken to protect your employees' hearing.

Ultrasonic Air Surveys

Ultrasound air surveys detect leaks in pressure and vacuum systems, detect electrical arcing, and inspect for bearing failure.

OUR LOCATIONS



Wausau - North/Corporate

5101 Mesker Street • Schofield, WI 54476
715-359-3155 • t/f: 800-283-8332 • fx: 715-355-5931



Wausau - South

1730 County Road XX • Rothschild, WI 54474
715-359-4860 • t/f: 888-246-1249 • fx: 715-359-9450



Sturtevant

10200 Durand Ave • Sturtevant, WI 53177
262-886-1875 • t/f: 800-367-7676 • fx: 262-886-9202



Appleton

2820 N Roemer Rd • Appleton, WI 54911
920-730-0203 • t/f: 800-283-5564 • fx: 920-730-0937



Minneapolis

9300 Evergreen Blvd NW • Minneapolis, MN 55433
763-780-3234 • t/f: 800-290-9320 • fx: 763-780-3957



Duluth

4413 Venture Ave • Duluth, MN 55811
218-729-3375 • t/f: 800-943-9549 • fx: 218-729-3382



Menominee

1100 56th Ave • Menominee, MI 49858
906-864-2500 • t/f: 800-864-2507 • fx: 906-864-3672



Hydro Solutions

1810 County Road XX • Rothschild, WI 54474
715-359-0551 • t/f: 877-258-5128 • fx: 715-355-5948