YOUR PREMIER SUPPLIER OF PUMPS, PARTS, SERVICE, TRAINING AND FABRICATED SYSTEMS

R.F. MacDonald Co. offers service and maintenance plans to keep your equipment in top operating condition. Our factory trained and certified technicians are available for field service throughout California and Nevada 24 hours a day, 7 days a week.

We offer specialized services to keep your equipment operating at peak efficiency. These services include inspection and testing, as well as predictive and preventative maintenance programs to help decrease downtimes while increasing equipment longevity.

We Repair and Maintain All Rotating Equipment:

- Positive Displacement, Centrifugal, Vertical Turbine and Vacuum Pumps
- Compressors (wet & dry)
- Mechanical Seals
- Blowers
- Steam Turbines
- Gearboxes
- Cooling Tower Fans
- Conveyors
- Refiners
- Drives
- Centrifuges
- Motors
- Mixers

R.F. MacDonald Co. reconditions all types of centrifugal and positive displacement pumps. We also repair rotating equipment such as gearboxes, vacuum pumps, fans, motors and blowers.

- Engineered pump support with field service capabilities such as pickup and delivery
- Troubleshooting, repair, installation, laser alignment, vibration analysis and vertical turbine rebowling
- In-house fabrication services, assembling custom pre-wired, pre-piped pump skids
- The advantage of updated engineering technology and a large inventory of replacement parts

IN THE SHOP

IN THE FIELD

We employ ASME code certified welders and a fleet of fully equipped service trucks which can quickly be dispatched to your job site to perform the following services with our General Engineering Contractor License A-1.

- Pump Repair
- Installation/Removal
- Startup
- Alignment
- Vibration Analysis
- Onsite Training
- Onsite Overhauls
- Pipe Fitting
- Consultation
PUMP INDUSTRY EXPERTS SINCE 1956

SHOP SERVICES

Pump Rebuilds
- Disassembly and Inspection of All Rotating Equipment
- Replace All Components to Meet or Exceed Manufacturer’s Specification
- Dynamically Balance Impeller to API 610 Standard or Manufacturer’s Specification
- Complete Machining Capabilities for All Equipment Requirements

Vertical Turbine Rebowling
- Bring Your Vertical Turbines Back to Original Performance Specifications
- New Custom Discharge Heads Can Be Provided to Address Vibration
- Corrosion, Erosion, Cavitation Analysis
- Rebowling, Pump Only Replacement
- Adapt to all Pump Manufacturers

Mechanical Seals & Couplings
- Rebuild and Replace Seals, Flush and Quench Packages
- Seal Failure Analysis
- We Stock Most John Crane Cartridge Seals; Trade-In Program Available
- Coupling Inspection and Replacement
- Expedited Repair Services

FIELD SERVICES

Installation and Startup
- Equipment Upgrades and Retrofits
- Specially Trained Technicians, Electricians and Code Welders
- State of the Art Equipment, Tooling
- Factory Authorized Startup Per Mfg Parameters
- Determine Operational Baseline: Flow, Pressure, Temp and Vibration

Vibration Analysis
- Troubleshoot Problematic Mechanical, Environmental, Hydraulic, Structural Vibration Frequencies and Operational Failures
- Equipment Monitoring
- State of the Art Calibrated Equipment
- Predictive Equipment Failure Analysis

Laser Alignment
- Coupling Alignment
- Precision Installation in Accordance with Manufacturer Specifications of All Coupled Equipment
- Equipment Installation Evaluation; Eliminate Pipe Strain, Soft Foot and More
- Hot and Cold Alignment Protocols which Meet or Exceed Manufacturer’s Specifications
FULL COVERAGE FROM MULTIPLE OFFICES THROUGHOUT CA & NV

**Inspection and Analysis**

- Complete Disassembly and Inspection with Sandblasting
- Detailed Failure Analysis and Inspection Reports
- Precise Measurements Recorded
- Non-Destructive Testing, Welding and Machining Capabilities
- Equipment Tracked for Maintenance History

**Dynamic Balancing**

- In-House Precision Balancing, Onsite Dynamic Balancing Standard Service for All Pump Repairs
- ISO Balancing Based on API 610 Standard or Manufacturer’s Specification
- Analyze Mechanical, Hydraulic or Peripheral Cause
- Preventative Maintenance Programs Available

**Specialty Coatings**

- Epoxy Resins, Coal Tar, Powder Coat Fused for Long Life
- Passivation and Electropolishing, Electroless Nickel
- Hard Coating for Corrosive Chemical, De-Ionized Water, Chlorinated Water and Abrasive Applications
- History of Success with Extending Pump Life

**i-Alert2® Pump Monitoring**

- Operational Diagnostics, Early Detection of Machine Failures
- Vibration, Temperature, Run-Time Monitoring with Advanced Vibration Analysis Tools
- Industrial Rated for Hazard or Submersible Environments, Bluetooth Capable
- Data Logging and Trend Analysis, Raw Data Sheet Analysis Service

**Instrumentation and Control**

- Controls, Monitoring and Accessories for Pumps and Systems
- Fully Compatible with Your Management System
- Continuous Measurement and Control Capabilities
- Understand Pump Performance Using Advanced Analytics

**Pickup and Delivery**

- Fully Equipped Fleet of Flatbed Trucks with Hydro and Auto-Cranes for Convenient Pickups
- Tough, Safe and Reliable Transportation, Handling, Rigging and Lifting Protocols
- All Weights and Equipment Accommodated
- Trained Safety Conscious Transportation Staff
FACTORY AUTHORIZED SERVICE CENTER FOR MAJOR MANUFACTURERS INCLUDING:

- ITT Goulds
- Grundfos
- Seepex
- Fybroc
- Boerger
- Xylem
- Weir
- Viking
- Blackmer
- Netzsch

VALUE-ADDED SERVICES

Pump Training

- Site-Specific and Equipment-Specific Training at Customer Site
- Lecture and Hands-On Classes at RFM Locations throughout CA and NV
- Instruction by Our Pump Expert with 38 Years of Pump Experience
- CWEA and AFE Certified Classes

Parts and Accessories

- 24-Hour Access to Parts
- 24/7 Parts Response
- $5 Million in Stock
- Replacement Parts and Reverse Engineering Capabilities
- Rapid-Pattern Manufacturing

Gearbox Repair

- Motor-Mounted Gearboxes
- Right Angle Gearboxes
- Semi-Automatic and Automatic Gearboxes
- Helical Gearboxes
- High Speed Gearboxes

Vacuum Pump Repair

- Disassembly, Inspection and Cleaning
- Replace Vanes, Seals, Gaskets, Springs, O-Rings and Valves
- Multi-Step Decontamination and Cleaning Process
- Hydro Tested
- Assembly Report and Test Report Supplied

ASME Code Welding

- NBIC R Certificate: Repairs and Alterations to Pressure Retaining Items
- ASME S Certificate: Manufacturing of Power Boilers and Power Piping
- ASME U Certificate: Manufacturing of Unfired Pressure Vessels
- Industrial, Institutional, Commercial and Public Building Services

Energy Savings & Process Improvements

- Variable Speed Pumping Solutions
- Programming of VFDs
- Pump Curve Flexibility
- Equipment Monitoring Technology
- Engineer-Designed Systems and Upgrades
- Eliminate Energy-Consuming Control Valves
YOUR SINGLE SOURCE PARTNER

PUMPS AND SYSTEMS
- High pressure condensate return systems
- Complete range of process pumps
- Water reduction via alternative seal flush plans and coolers
- i-ALERT® 2 Performance Monitoring

PUMP MAINTENANCE PROGRAMS
- Factory trained technicians
- Warranty services
- Large parts inventory
- Authorized service center for major manufacturers

SERVICES AND INSTALLATION
- Rental equipment and mobile boiler rooms
- Full aftermarket service and parts support
- Instrumentation and controls

PUMP AND BOILER TRAINING
- AFE Certified
- CWEA Certified
- Visit rfmacdonald.com/training

rfmacdonald.com