

# BOILER SERVICE AND REPAIR

BOILERS

PUMPS

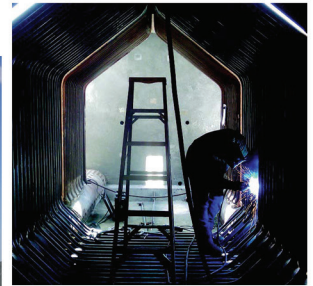
COMPOSITES

RENTAL

SYSTEMS

SERVICE

PARTS



**R.F. MacDonald Co.**

*your boiler & pump solutions team*

*~ since 1956*

## 24 HOUR EMERGENCY SERVICE, 365 DAYS A YEAR

### YOUR PREMIER SUPPLIER OF BOILERS, 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 downtime while increasing equipment longevity.

#### Boiler Sales

- Quality Name Brands
- Ancillary Equipment
- SCR Systems

#### Fabricated Systems

- Custom Design
- Condensate Systems
- Single Points of Connection
- Hot Water and Steam Boiler Skids
- Pumps and Heat Exchangers
- In-House Design/Build Team

### FIELD SERVICE FROM MANY LOCATIONS

We employ ASME code certified welders and a fleet of fully equipped service trucks which can be quickly dispatched to your job site to perform the following services with our General Engineering Contractor Licenses A, C-4 (CA) and A, C—1 (NV).

- Emission Compliance Monitoring
- ASME and National Board Certified Boiler Repairs
- A Wide Range of Scheduled and Emergency Services
- Dispatch Locations Throughout California and Nevada
- Combustion Tuning
- Troubleshooting
- Annual Inspections
- Refractory Repairs



#### Maintenance and Training Programs

- Factory-Trained Technicians
- Warranty Services
- Large Parts Inventory
- Authorized Service Center
- Upgrades and Retrofits
- Customer Site Training



#### Instrumentation and Controls

- Building Management System Interface
- Combustion Control Upgrades
- Continuous Emissions Monitoring
- Oxygen Trim Systems
- Supervisory Control and Data Acquisition
- Complete Boiler Room Automation





# BOILER INDUSTRY EXPERTS SINCE 1956

## FIELD SERVICES

### Installation



- Consultation and Boiler Sales
- Plant and System Design
- 24/7 Boiler System Installation and Support
- Boiler Startup and Equipment Training
- Servicing, Maintenance and Commissioning
- Boiler Rigging

### Instrumentation & Controls



- Integrated Systems with Remote Communications
- Automatic Temp Control and Energy Management Interfaces from Easy-to-Use Touch Panels
- Customized Instrumentation, Calibration and BMS Testing
- Boiler Instrumentation Testing
- Boiler Control Panel Building

### Retubing



- Pressure Vessel Inspection
- Boiler Tube Extraction
- Boiler Tube Installation
- Testing and Quality Control
- Experienced and Certified Pressure Vessel Welders
- Welding for Repairs, Maintenance and Retubing

### Welding



- "R" Stamp Holder
- Code Certified Welding of All Materials: Carbon, Stainless and Other Exotic Metals
- Experienced and Certified Pressure Vessel Welders for Repairs, Maintenance and Retubing
- Shop and Field Fabrication of Boiler Pressure Parts Including Drums and Heaters

### Burner Retrofitting



- Certified, Classified, Indemnified and Bonded Single-Source Contractor
- Broad Skillsets for a Wide Range of Application Markets
- Meet Compliance of Emissions Regulations
- Help Burners Run as Efficiently as Possible
- Help Reduce Operating Costs for Facilities

### Boiler Skid Fabrication



- Spec and Build Any Custom Unit, Including Steam and Hot Water Boilers, Deaerators, Feed Systems and Ancillary Equipment
- Our Highly-Experienced Engineering Staff Will Design a Fabricated System to Your Specification Needs
- Mechanical and Electrical Documentation Included Throughout
- Optimized Field Labor and Simplified Field Connections Reduce Project Costs



# FULL COVERAGE FROM MULTIPLE OFFICES THROUGHOUT CA & NV

## Air Quality Source Testing



- Compliance Demonstrations
- NOx Emissions Guaranteed to Meet Local and Federal Air Quality Requirements
- All Makes of Boilers with Retrofit Burners Can be Tested and Calibrated
- Continuous Monitoring Systems

## Full SCR Systems



- SCR System Inspections
- Engineering Support
- Fuel Analysis
- SCR System Inspections and AIG Tuning
- All Types of Ultra Low NOx Systems, Including Urea, Ammonia and Any New Technology that Enters the Market

## Pipefitting



- Experienced and Certified Pressure Vessel Welders
- Welding for Repairs, Maintenance and Retubing
- Shop and Field Fabrication
- Welding of All Materials: Carbon, Stainless and Other Exotic Metals

## Refractory Repair



- Repair of Refractory Damage Due to Pressure Vessel Leaks
- Repair Damaged Seal Joints and Broken Refractory Tiles
- Replacement of Plastic, Castings, Tile and Special Forms
- Onsite Refractory Rear Door Inspection, Repair and Replacement
- Refractory Installation and Startup

## Boiler & Pressure Vessel Inspections



- Experienced and Certified Pressure Vessel Welders
- Inspecting for Signs of Leakage, Corrosion, Cracking, Overheating, Scale, Deterioration
- Assuring Your Inspection, Testing and Maintenance Program is Adequately Designed, Installed, Maintained and Functional to Protect Your Equipment

## Mobile & Rental Equipment



- Boiler Equipment and Full Mobile Units Available
- Eliminates Downtime
- Continued Operation During Planned Offline Maintenance
- Meets Local Requirements and Standards
- Easy Hookup
- 24/7 Expert Guidance and Support

# FACTORY AUTHORIZED SERVICE CENTER FOR MAJOR MANUFACTURERS INCLUDING:

• Cleaver Brooks • Camus

## VALUE-ADDED SERVICES

**The R.F. MacDonald Co. Assured Equipment Performance Program (AEP)**  
for Annual Boiler Safety, Performance, Compliance and Efficiency Inspection, Testing and Plant Services

### BOILER TESTING PER YOUR LOCAL APCD MONITORING RULE REQUIREMENTS

- Supply a certified technician and analyzer
- Perform pre and post emissions testing calibration of our analyzer
- Generate a written report detailing performance of identified equipment during test duration

### PREDICTIVE MAINTENANCE



### COMPLETE BOILER CLEANING AND INSPECTION SERVICE

- Annual boiler cleaning and inspection to clean heat transfer surfaces for maximum reliability
- Includes replacing all fireside and waterside gaskets and testing to ensure safe and reliable operation of the equipment

### PERIODIC PREVENTATIVE MAINTENANCE AND FINE-TUNING SERVICE PROGRAM

- Periodic preventative maintenance services and fine-tuning to factory specifications for absolute maximum combustion efficiency
- Monthly combustion, emission and safety checks with minor tuning adjustments to ensure compliance

### Parts & Accessories



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

### Boiler Operator Training



- A Full Schedule of Classes Throughout Our Service Regions
- Onsite Sessions Offered for Complete Customized Staff Training
- Site-Specific and Equipment-Specific Training at Customer Site
- CWEA and AFE Certified Classes

### 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

## CORPORATE

25920 Eden Landing Road  
Hayward, CA 94545  
510.784.0110

## BAKERSFIELD

3001 Antonino Avenue  
Bakersfield, CA 93308  
661.325.5057

## FRESNO

4912 West Jacquelyn Avenue  
Fresno, CA 93722  
559.498.6949

## LAS VEGAS

3111 S. Valley View Blvd., Suite E-120  
Las Vegas, NV 89102  
702.220.6680

## LOS ANGELES

10261 Matern Place  
Santa Fe Springs, CA 90670  
714.257.0900

## MODESTO

1549 Cummins Drive  
Modesto, CA 95358  
209.576.0726

## RENO

8565 White Fir Street, Unit B2  
Reno, NV 89523  
775.356.0300

## SACRAMENTO

1016 N. Market Blvd., Suite 10  
Sacramento, CA 95834  
916.696.6758

## SAN DIEGO

7320 Convoy Court  
San Diego, CA 92111  
858.538.5877

## SONOMA/NAPA

642 Martin Avenue, Suite B  
Rohnert Park, CA 94928  
707.586.9234

## CONTRACTOR LICENSE

CA: #220117  
NV: #0042816

[rfmacdonald.com](http://rfmacdonald.com)



## BOILERS AND SYSTEMS

- Full range of commercial boilers from 60,000 to 12 million Btu/hr
- Full range of industrial boilers from 4 to 500 million Btu/hr
- SCR and control system solutions
- Engineering and design support



## BOILER 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](http://rfmacdonald.com/training)



**R.F. MacDonald Co.**

*your boiler & pump solutions team*  
~ since 1956