#### **MSI Combustion Services**

Services & Capabilities

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#### **Global Offerings:**

- Field Service & Repairs
- Burner Tune-Ups
- Preventative Maintenance Contracts
- Commissioning & Installation
- Energy Efficiency Studies
- Thermal Imaging
- Combustion and Safety Training
- Waste Heat Recovery
- Safety Surveys & Accident Investigations
- Propane Backup Systems & Tank Flaring
- Environmental Emission Testing

## Field Service & Repairs:

Process heating equipment has a mind of its own as to when and when it will not operate. MSI field service technicians understand this and have serviced all major brands of process heating equipment as well as their respective control systems. MSI technicians are on call 24/7/365 to meet production needs, and they receive monthly training with a focus on energy reduction strategies. MSI field service technicians have provided service in countries as far away as China and Israel.

## **Burner Tune-Ups:**

The single most important factor to ensuring any process heating line is running as efficiently as possible is to know the burners are properly tuned. Burner Tune-Ups can account for a 10 percent increase in burner efficiency. On a 1 mm btu/hr burner at \$0.90 per Therm and 4,800 operational hours per year this is a savings of about \$4,800.00 for just one burner! Increase profits by letting MSI's experienced field service team maximize the performance of your company's combustion equipment.

## **Preventative Maintenance (PM):**

While downtime is an inevitable evil in the process heating industry, a sound PM schedule greatly reduces these occurrences. MSI offers monthly, quarterly, semi-annual and annual preventative maintenance contracts. Enrolling in one of these contracts provides peace of mind in knowing the equipment is functioning properly. In addition all participants receive 10% off service calls and parts.

### **Commissioning & Installation:**

MSI can support the installation of entire systems such as ovens, furnaces, boilers, kilns, etc or can commission specific areas such as burners, valves and much more. MSI can provide the manpower to support most any project or can simply provide an engineer to work with your team. Trust your new project to the experience and proven success of MSI technicians and engineers.

## **Energy Efficiency Studies:**

MSI staffs a United States Department of Energy Qualified Process Heating Specialist as well as a Certified Energy Auditor through the Association of Energy Engineers. MSI's energy studies use cutting edge software to accurately determine electricity, fossil fuel and steam costs, both in real dollars and units of consumption. This information is provided in a detailed report including graphs and spreadsheets of energy usage including potential savings. The service also includes thermal images of the equipment. In today's economy this service is an invaluable addition to any company's bottom line.

















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## **Thermal Imaging:**

MSI uses a state of the art thermal imaging camera to quickly identify hot spots and areas of heat loss. The camera is effectively used in energy studies, electrical systems, building studies and preventative maintenance. In process heating a thermal imaging camera can determine if a product is being heated evenly. In building management the camera can detect heat infiltration or poor insulation. Why guess what may be happening when a thermal image shows exactly what is happening?

## **Combustion & Safety Training:**

MSI's combustion and safety training classes are tailored to the equipment of each facility. Topics include combustion theory, air & fuel delivery systems, burner adjustment, safety as well as preventative maintenance techniques. The training classes are PowerPoint driven and offer part classroom and part hands-on study. The hands-on study is with MSI's test burners and flame safeguard learning modules. Each attendee is provided with a spiral workbook and will receive a certificate of completion.

## **Waste Heat Recovery:**

MSI's team of energy experts identify sources of waste heat through energy studies, thermal imaging and plant studies. This information is used to provide effective solutions of using this heat in other areas. Unlike most companies MSI is able to complete these projects 100% in house. Waste heat recovery is one of the fastest growing fields in the combustion industry. Put your waste heat to work for you with MSI's proven strategies.

## Safety Surveys & Accident Investigations:

MSI has established a 20 point safety survey that meets and exceeds the NFPA Article 86 guidelines. The safety survey covers the NFPA's requirement of annual testing and includes burner adjustments and a detailed report of all findings. If needed MSI can tailor the safety survey to meet other requirements such as FM and other insurance providers. Each safety survey includes a spreadsheet of all pressures, settings and flows. This information is paired with technician findings, recommendations and areas of improvement.

# Propane/Fuel Oil Back-up Systems & Tank Flaring:

To receive the best prices from natural gas suppliers companies are often required to curtail usage during peak times in winter months. To get these rates a propane/fuel oil back-up system must be ready to meet your company's demand. MSI supplies, installs and maintains these systems. In addition MSI can flare the fuel in propane tanks as needed for scheduled tank checks or safety provisions.

## **Environmental Emission Testing:**

MSI can monitor or simply test the emissions from many combustion processes. Several local principalities as well as the EPA and state governments now require testing to meet newer clean air guidelines. MSI can provide this information in a detailed report and can work with your company to improve upon its findings.















