

TODAYS BEST AVAILABLE COMBUSTION TECHNOLOGY

IGB INSTATHERM™

METAL FIBER BURNER SYSTEM

LOW EMISSIONS • HIGH EFFICIENCY



The **Low NO_x** Solution for Atmospheric Boilers®!

- Guaranteed to meet SCAQMD/APCD 12ppm Low NO_x Requirements
- Cuts Fuel Cost
- Easy Installation
- Works for 100,000-8 Million BTU/H Boilers



ENVIRO-ENERGY SERVICES, INC.

**BURNER
DIMENSIONS:**

Built to meet your requirements.

INPUT:

Ranges from
100,000 MBTU/H to
8 Million MBTU/H

BURNER**TEMPERATURE:**

1800-2000° F within 1/4
inch of the burner surface
within 20 seconds.

GAS CONNECTION:

5.0" min to 10.0" Max W.C.

**ELECTRICAL
CONNECTION:**

230 VAC/120 VAC 1-Ph 60
Hz. 30 AMPS. Independent
circuit required.

FUEL:

Natural Gas, Propane or
Industrial Gas.

**TYPICAL
APPLICATIONS
INCLUDE:**

BOILERS
OVENS
WATER HEATERS
EVAPORATORS
HEAT TREAT FURNACES
AND MUCH MORE

NOTE: Insta-Therm burner
may be applied in almost
any application where clean
high efficiency combustion is
required.

IGB INSTATHERM

METAL FIBER BURNER SYSTEM

IGB Insta-Therm Burner Retrofit Kits

NON-MODULATING BURNERS

Model Number	Description
BIT-MF-0500X	500,000 BTU/HR Burner Kit with Control Panel
BIT-MF-1000X	1 MBTU/HR Burner Kit with Control Panel
BIT-MF-1300X	1.3 MBTU/HR Burner Kit with Control Panel
BIT-MF-1600X	1.6 MBTU/HR Burner Kit with Control Panel
BIT-MF-1900X	1.9 MBTU/HR Burner Kit with Control Panel
BIT-MF-1999X	1.99 MBTU/HR Burner Kit with Control Panel

MODULATING BURNERS

(1MBtu-8MBtu Modulating Systems Available)

Model Number	Description
BIT-MF-2000XM	2 MBTU/HR Burner Kit with Control Panel
BIT-MF-2500XM	2.5 MBTU/HR Burner Kit with Control Panel
BIT-MF-3000XM	3 MBTU/HR Burner Kit with Control Panel
BIT-MF-3500XM	3.5 MBTU/HR Burner Kit with Control Panel
BIT-MF-4000XM	4 MBTU/HR Burner Kit with Control Panel
BIT-MF-5000XM	5 MBTU/HR Burner Kit with Control Panel
BIT-MF-6000XM	6 MBTU/HR Burner Kit with Control Panel
BIT-MF-7000XM	7 MBTU/HR Burner Kit with Control Panel
BIT-MF-8000XM	8 MBTU/HR Burner Kit with Control Panel

- Cal Code Gas Line, all UL Certified components
- Burner systems are custom designed to each boiler application



2010-8-30

Call **RKDM**
today at:
(714) 952-2811

or visit our website at:
www.instatherm.com



ENVIRO-ENERGY SERVICES, INC.

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IGB INSTA-THERM

RKDM Enviro-Energy Services, Inc., has over 24 years of experience in the boiler industry working with all types of boiler systems. The *IGB Insta-Therm* metal fiber burner is designed to convert Atmospheric Boilers to meet the 9ppm, 20ppm and 30ppm NO_x requirements being imposed in various regions to tackle air quality concerns.

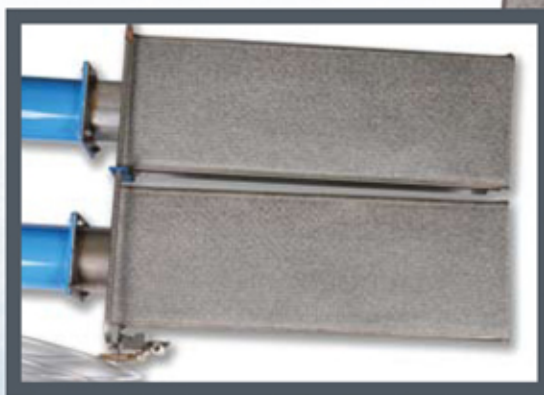


MEETING LOW NO_x REQUIREMENTS

USING GERMAN TECHNOLOGY our premix combustion blower unit takes in outside air and mixes it with gas to get a consistent air to gas ratio to improve combustion efficiency and help lead to fuel savings. **Our Integrated Gas Baffle™** (IGB Technology) maximizes the gas distribution in the burner box to allow even flame transmission producing a constant heating surface over the burner.



IGB Insta-Therm Burners are constructed from a steel body and state of the art Metal Fiber Mat technology. Low NO_x emissions are achieved when near perfect air gas combustion produces a flame just above the Metal Fiber Mat. During operation the burner housing remains cool to the touch avoiding any heat retention. The *IGB Insta-Therm* Burner produces the cleanest flame and maximizes the combustion efficiency that can lead to a 10%-12% gas savings. *IGB Insta-Therm* Burner can bring an old boiler back to the original combustion efficiency.



The *IGB Insta-Therm* Burner System platforms are placed under the tube bundles in a non-pressurized combustion chamber to heat the boiler system. The burners can be fired in any direction downward, upward, or sideways.

APPLICATION:

Our Engineers can design an *IGB Insta-Therm* burner system to fit any boiler design. The burner system is available in three configurations; on/off, modulating or modular.

The *IGB Insta-Therm* Burner by RKDM Enviro-Energy Services is built with U.L.® approved components and goes through a full range of factory testing before shipping. Our burner is a field tested system designed to meet the most stringent SCAQMD/APCD emission requirements.

Call RKDM today at: **(714) 952-2811** or visit our website at:

IGNITION CONTROL PANEL:

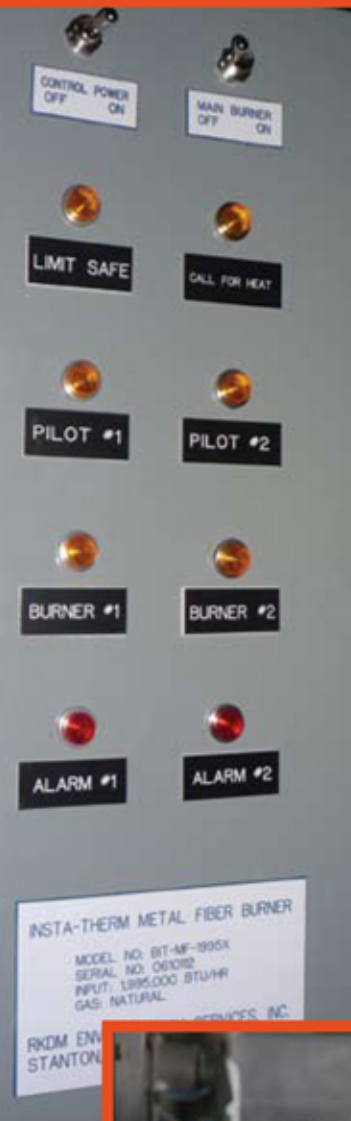
RKDM *Enviro-Energy Services* provides an innovative burner Ignition Control Panel which is equipped with a Honeywell™ flame safeguard module with display and remote control capability. Included is a built in pre-purge and post purge cycle to clear out the burner cavity. Multiple Control Panel indicating lights help to diagnose a problem, if any, and conveniently troubleshoot the issue.



BUILT-IN SAFETY:

The IGB *Insta-Therm* Burner System is equipped with:

- Air Pressure Safety switch to monitor the combustion air blower and burner. Gas will be shut down if combustion air blower fails or there is burner damage.
- Two solenoid valves.
- Cal Code gas line, All U.L.® listed components.
- Industrial Pilot with ignition transformer.



FIELD SUPPORT:

Our highly qualified Engineering support staff look forward to assisting you for any installation and will be available for issues related to burner applications. We guarantee the IGB *Insta-Therm* Burner can meet any CO, and NO_x requirements.

CLEAN AIR

NO_x emissions of less than 12ppm (corrected to 3% oxygen).

IMPROVED EFFICIENCY

Operating cost can be cut by up to 12% with IGB *Insta-Therm's* superior fuel utilization capabilities.

EASY INSTALLATION

Can be installed in most boilers without major modifications. Just remove the old burners and slide in IGB *Insta-Therm* Metal Fiber Burner. Keep the existing boiler safety controls and running interlocks. Interface boiler with new Ignition Control Panel.

FLEXIBILITY

Operating in three different modes: Radiant, Radiant/Convection and Convection without any loss in effectiveness.

INSTANTANEOUS HEAT DELIVERY

Within 20 seconds after ignition, burner produces temperatures of 1800-2000° F degrees. Turn IGB *Insta-Therm* off, and burner surface is immediately cool to the touch.

LOW MAINTENANCE

Any qualified maintenance person will be able to service your boiler combustion system. If environment is dusty an air filter is recommended.

QUALITY ENGINEERING AND APPLICATION

Backed by our highly qualified Engineering staff, who is available to work out the details of your burner application.

LONG DEPENDABLE LIFE

The IGB *Insta-Therm* Burner System has been tested extensively and proven trouble free under the most demanding conditions.

