BURN OFF OVENS

Convection PLUS Radiant Heating Makes ene

THE ORIGINAL BURN OFF OVEN INVENTED HERE IN 1970

ace Since 1919
ACE EQUIPMENT COMPANY
4725 MANUFACTURING ROAD
CLEVELAND, OHIO 44135
WWW.ARMATURECOIL.COM
800-255-1241•216-267-6366•FAX 216-267-4361

The ACE Radiant Tube Oven

SIGNIFICANTLY HIGHER FUEL ECONOMY & SHORTER TIME CYCLES

The superior heating efficiency of our new **Model RT** Radiant Tube Burn-off Ovens just begin with a 50% improvement in rapid heat-up and cool-down resulting in shorter cycle times, 20% fuel savings and +/- 10° F. heat uniformity. As a ball park figure, solely convection heated ovens only have the ability to generate up to 65% thermal energy efficiency. We offer much more than a solely convection heated oven. Burn-off ovens heated solely by convection, like an incinerator, are subject to serious drawbacks, including a relatively low rate of heat transfer, as well as an inherent requirement for air movement. Solely convection heated ovens result in still further drawbacks attributable to uneven heating. The load is heated non-uniformly, resulting in damaged parts, while uneven heating also produces cold spots in the oven enclosure (generally by the floor near the front door). Some manufacturers require a second thermocouple positioned in the cool spot to assure the parts are uniformly heated, lengthening the heat cycle time, to suit the weight of the load before the end of the heat cycle. **Count on ACE's convection plus radiant energy design to achieve maximum heat transfer without any cold or hot spots and have the ultimate in energy savings break through heat transfer technology ever designed.** We use a variety of heat transfer technologies including infrared, convection and conduction that we apply efficiently and control precisely to make our burn-off oven process more productive and profitable. Our proven heating system is engineered to combine all the great features of convection heat, plus the boost of long-wavelength radiant heat, to bring you the world's most advanced high energy efficient heating system. Added energy in the right places makes the difference between merely acceptable and truly outstanding performance. Infrared delivers intense energy, so the heat-up curve is steeper and the heat-up time is significantly reduced. Heats even in the harshest environment. ACE guarantees to deliver greater heating efficiency, lower fuel cost, shorter time cycles, and less maintenance than other comparable ovens on the market. Combustion efficiency of convection plus radiant heat is approximately 93%.

FEATURES OF THE ACE RADIANT TUBE HEATER

1. It provides an over-all uniform heat with a lower, surrounding air temperature in the oven.
2. ***Almost instantaneous heat delivery***, primarily because it is not necessary to heat large volumes of air in the main burner firebox before starting to heat the load The pick-up-factor is practically nil.
3. The main burner fire box in other ovens, and also in our model RKG ovens, is completely eliminated., resulting in a tremendous savings in shorter cycle time and wasted energy conducted to outside walls.
4. Because the system is a low-intensity infrared radiant heater, it may be in close proximity to the load without fear of damage due to excessive concentrated heating. Surface of the radiant tube is generally only about 100° F. (37° C) hotter than the ambient air temperature during the heat cycle.
5. The load acts as a heat sink or reservoir, thereby reducing temperature sag when the heating system goes to low-fire at setpoint temperature.
6. The radiant tube heating system for the primary chamber is simple to install and maintain.
7. Convection heat is emitted from the multiple holes on the left and right sides of the radiant tube.
8. Patent Pending

Radiant Energy Reflects and Transmits to Parts and Walls

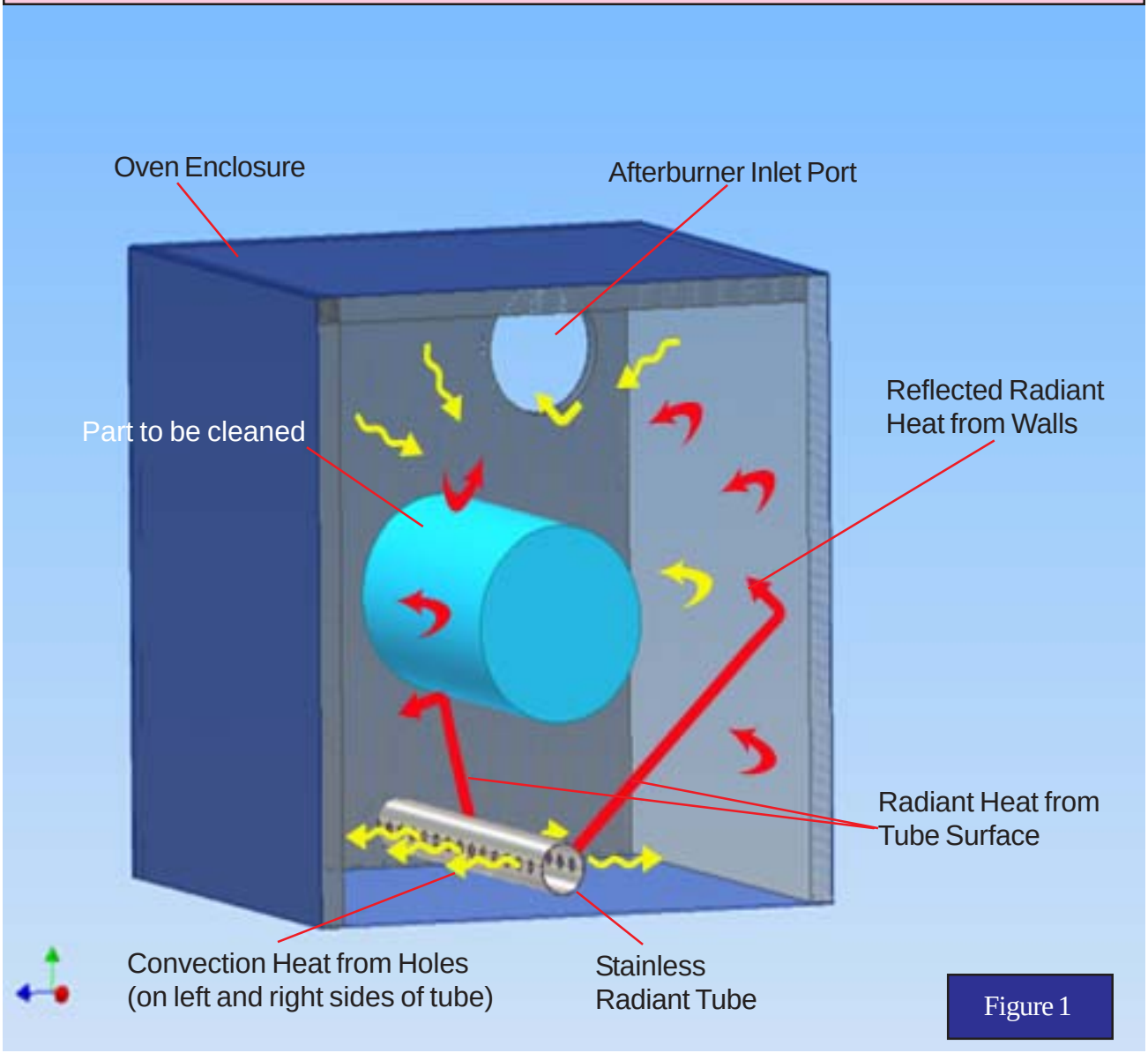


Figure 1

When a surface does not absorb all of the radiation, the portion not absorbed will either be transmitted or reflected. Most solids are opaque and do not transmit radiation. The portion of the irradiation which is not absorbed is, therefore, reflected back into the oven space.

Of special interest are the interior surfaces of the **ACE RT** oven. These refractory wall surfaces diffusely reflect and emit radiation at the same rate at which they receive it. The interior walls receive heat by convection as well as radiation and lose heat to the outside by conduction. In practice, however, the heat flow by radiation is so much larger than the difference between the heat flow by convection to and the heat flow by conduction from the surface that **the walls act essentially as reradiators.**

Convection heating supplies heated air at a temperature above the desired product temperature; in effect, the entire product is heated to an equilibrium temperature, usually between 250 to 900° F. (121 to 482°C). Convection ovens direct air at the product to do the work of drying, curing or heating.
Convection is suitable for uniformly transferring heat to a product. Its advantages include:

- Accurate control of temperature.
- Simplified control systems.
- Uniform, heating regardless of product size or shape.
- Moisture removal.
- When a uniform process heating temperature is required, convection heating is a good choice.

Convection heating also has some limitations. **The primary disadvantage of convection heating is its low rate of heat transfer and inherent requirement for air movement. These characteristics result in longer startup and cool down time.**

Combination (Combo) Heating. Rapidly transfers heat to a product with infrared and simultaneously moves air over the product with convection in the same zone. Combination ovens are suitable for applications where temperature-sensitive products (aluminum) require high rates of mass heat transfer.
Advantages of combination ovens:

- Well-designed to give long and trouble-free service, safe and cost-effective design possible.
- Accurate temperature control.
- **Rapid heat-up and cool down.**
- Consistent uniform heating.
- Removal of moisture.
- Reduces energy costs.

Model 4400 Controller

UNSURPASSED COMBINATION EFFICIENCY

Radiant Heating Radiant heat possesses certain ideal fundamental properties that make it the best possible source of heat energy in any direction. Also called (IR) infrared heating, infrared heating involves an exterior heat source directing its energy at the product to be heated. Infrared heating results from the absorption of radiant energy by an object. Infrared relies mainly on line-of-sight heat transfer, which means that a radiant source only heats surfaces it can see; it does not heat the air. Once the product is heated, some heat transfer occurs within the product due to conduction. This type of heating is suitable for transferring large amount of thermal energy to rapidly heat a product***. A good example is a toaster***.
High rates of heat transfer without air movement are possible with infrared heating. Varying intensities can be selected based on the process requirements. Infrared technology provides several process advantages, including:

- Fast production startup and cool down
- High heating efficiency
- Heats the load and not the air
- No air movement
- Easy and effective zoning of heating sources.
- High temperature capabilities

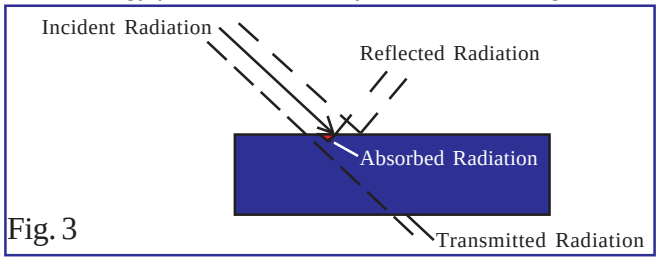


Fig. 3

So, when you need to transfer large amounts of thermal energy to heat a product quickly, there are definite advantages to be had using infrared.
Convection Heating This heating method involves the indirect transfer of thermal energy by the circulation of a heated carrier such as air. The greater the air velocity and turbulence, the faster the heat transfer.
A common example of convection heating is a hand-held hair dryer.

HIGH-PERFORMANCE ON A TIGHT BUDGET

When we started manufacturing burnout ovens in 1970, energy costs were relatively low and were never a consideration. **Now, energy is a major issue in burn-off ovens, because of the high operating cost.** So, the key enabling technology is to keeping these costs down has become very important. There are, however, things that can be done to help a burn-off oven become more energy efficient.

Designed to go head-to-head with the top selling burn-off ovens, the (RT) gives you more of the performance and energy-saving features you want at a big savings. The (RT) is ideal for long term energy-savings and easy maintenance of the heavy gauge stainless alloy heater tube to provide long-term reliability.

DISCOVER A NEW DIMENSION IN OUR HEAT MANAGEMENT SYSTEM

But the benefits of using (RT) just begin with a 50% improvement in rapid heat-up and cool-down for short cycle times.and 20% fuel savings. The technological advantage of a combination of radiant plus convection heat focus is low maintenance, uniform heating, longevity, improved performance and significant competitive advantages. Convention plus radiant heating is one of the most advanced systems in the world – and it's available to you from ACE at a low price.

It operates with amazingly low fuel consumption. Combustion efficiency is approximately 93%, which is unattainable with any convection heat cleaning ovens. Our infrared heating system operates with unmatched efficiency. Convection plus radiant heat is a high efficiency heat source, and will give dramatic fuel savings over any other system. Significantly less fuel than the average new forced air convection system.

The radiant tube directs the infrared heat rays emitted by the radiant tube upward into exactly the desired area. The system heats a span-not-just a spot. Heat uniformity is +/- 10° F (-3.89° C) throughout the oven. Almost every BTU is wrung out of the products of combustion. The heavy-duty stainless alloy radiant tube constitutes an exceptionally rugged "Heat Exchanger" for a trouble-free service life, requiring little if any maintenance. When turned off or to low-fire, the radiant tube loses heat so rapidly, your product won't be damaged by residual heat. The radiant tube reaches operating temperature in seconds on startup preventing delays.

With convection heating systems, surfaces remain cool because only the air is heated. Using an entire surface as a radiator to conduct heat, a convection plus radiant system warms everything it touches – not just one object, but the entire load. Consider it nothing short of an historic breakthrough.

Conventional convection systems must be set at higher temperatures to achieve the same heat level as a convection plus radiant heat system. Just imagine no more uneven temperatures, no hot blasts, and no scorching hot spot temperatures or cold spots.

AN ADVANCED ENERGY AND HEAT TRANSFER SYSTEM

Infrared energy emitted from the heated surface of the radiant tube travels in straight lines or rays, which effectively heat all objects they strike, without heating the air they pass through. The ACE (RT) system operates in the intermediate temperature range, low intensity zone, with maximum emitter temperature up to 1,100° F. In this range, it may or may not intermittently glow visibly red, but emits its radiant energy in the long wave band of the infrared spectrum, approaching the theoretically perfect black body emitter. The design incorporates a relatively large emitting surface, which spreads its radiant energy in a uniform pattern over an extended area from the back to the front of the oven.

The ACE (RT) system is a heat resistant stainless steel alloy radiant tube, which directs the radiant energy upward. The radiant tube is located under the oven cart. It is positioned in the center of the oven and extends from the back wall to the oven door. A gas burner and burner mounting adapter tube are installed under the cart, in the center of the back oven wall. The radiant tube is then mounted to the adapter tube. Heat from the radiant tube results in consequent heat extraction efficiency in excess of 90%. No main burner firebox chamber needed.

Infrared heating, unlike conventional convection heating, does not depend on large quantities of heated air being distributed by gravity or the pressure of the combustion blower used in convection heat cleaning ovens. Convection heaters employ large volume, high velocity streams of hot air directed into the primary chamber in an attempt to maintain temperature throughout the heated space. Unfortunately, convection heating seldom achieves complete uniformity because of overheating (hot spots) in certain areas and under heating (cold spots) in other areas.

The difficulties encountered with convection heating stem directly from the use of these air currents. The velocity, discharge temperature of this air is often damaging to the load near the discharge port(s). As the velocity dissipates, the warm air rises to the roof. These rising currents induce the flow of colder air about much of the floor area, resulting in cold spots. Stratification of the warm air at roof level is especially wasteful when it is considered that the rate of heat transfer through the oven is greater as the temperature difference between the load and oven temperature increases. Heating by convection tends to be wasteful and often fails to maintain a satisfactory uniform temperature at floor level close to the oven door.

Infrared heating eliminates waste by converting most of the fuel energy to infrared rays which are focused up to bathe the entire load in their heat. These rays, readily absorbed by the load, roof and walls, raise them to a temperature slightly above the surrounding air. This duplication of natures own way of heating insures an even heat throughout the load without elevated air temperature, in which a greater part of the load losses are balanced by thermal radiation.

THE BASICS OF COMBINING CONVECTION AND RADIANT HEATING

- Infrared rays travel in divergent straight lines from heat source to all surfaces and objects, without heating the air they travel through.
- The energy emitted in the form of infrared by a natural gas flame is reported to be less than 5% of the gross energy content of the flame. This means the hot products of combustion (CO_2, H_2O and N_2) must transfer a portion of their sensible energy to heat the infrared radiant tube emitter by forced convection heating. Raising the emitter's temperature causes it to emit useful quantities of infrared.
- The mission of a radiant tube heater is to convert the chemical energy in a fuel gas, such as natural gas, to thermal radiation to perform useful work.
- As a secondary effect, the air temperature is raised by convective transfer from the heated surfaces.

ADDITIONALLY, A PART OF THE SECONDARY RAY ENERGY, NOW OF LONGER WAVE LENGTH, IS ABSORBED BY MOISTURE AND DUST IN THE AIR, HELPING TO RAISE THE AIR TEMPERATURE.

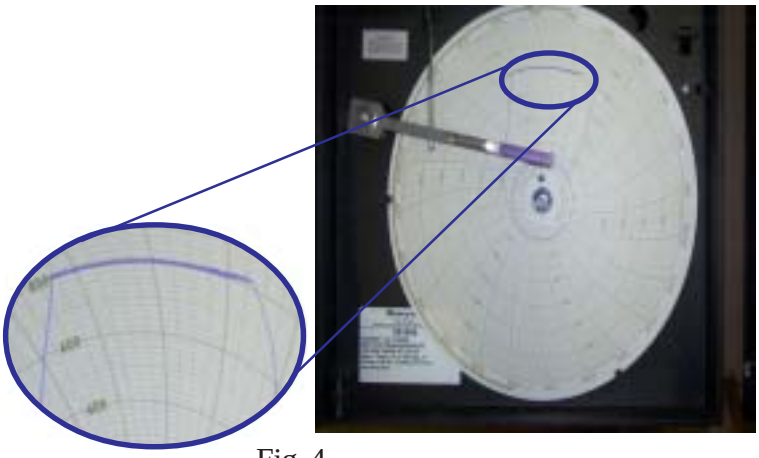


Fig. 4

Chart recording demonstrates tight temperature control throughout cycle.

TIPS FOR UNDERSTANDING HOW THERMAL CHARACTERISTICS AFFECT THE APPLICATION

Understanding how heat affects your application is the first step toward selecting a burn-off oven. Factors, such as heat response time, maximum heat transfer, life expectancy requirements and ease of service must be considered. While all factors are important, an overriding factor, such as ramping up temperature skillfully and safely for an acceptable period of time may be most important when determining final oven design.

TIP 1. DETERMINE THE BEST MAIN BURNER HEATER DESIGN

Although many different heater designs are available, not all will be suitable for your specific process.
A number of convection process main burner heater designs are offered on the market, including top down convection heat, straight convection heat from a main burner box with one outlet port located on the rear wall or a main burner fire box located under the cart with ports on the right and left.
Problems may persist with premature failures of the main burner fire box or inadequate heat distribution problems.
Convection heated ovens have a time lag from the time the burner turns on to when heat actually goes out of the main burner fire box and into the primary chamber to heat the load. The main burner fire box has a certain amount of heat storage time and conducted heat loss to the outside insulated walls.
Model RT ovens have no time lag. Flame is fired directly into the radiant tube, thus there is no main burner fire box. Resulting in no heat storage time and no conducted heat loss to the outside insulated walls.

TIP 2. THE FALLACY OF SOLEY CONVENTION HEATED OVENS

Sorry, but if you look at the definition of combustion, you'll see it assumes no heat is lost to the flame's surroundings, and that doesn't happen in the real world. No sooner do the air and fuel begin to react and create heat, and some of that heat escapes to the surrounding main burner combustion chamber or heating enclosure and all the product and fixtures it contains. ***It's like a water bucket with a big hole in the bottom***. **You can't fill it up because it's losing water almost as quickly as you pour it in.**

Flame temperatures tend to be higher in high temperature processes because the process doesn't suck the heat out of the flame as quickly. The mass of the main burner combustion chamber plays a big part. The greater that mass, the quicker it will pull heat out of the flame.

TIP 3. ENSURE HEATER DESIGN PROVIDES ADEQUATE HEAT TRANSFER

To be effective, a main burner heater fire box must deliver adequate energy to the primary chamber. This involves the heater's ability to provide sufficient heat distribution across the process area. The heater design must be able to disburse heat properly. Physical features, such as how the heater will be mounted, the amount of area that will be covered or the possibility of multiple heat zones should be considered. Also, consider any heat sink effects that may draw heat away from the application medium.

TIP 4. BE CERTAIN YOUR HEATER CAN HANDLE THE APPLICATION ENVIRONMENT

Ensure that all materials used in heater construction are rated to handle the maximum application temperatures to which they will be subjected. The heater also must be designed to handle the application environment, which may include caustic liquids, high humidity or maintenance conditions.

TIP 5. OVEN CONDITION CAN AFFECT COMBUSTION PERFORMANCE

Remember that 1 Sq. Ft. of oven opening can leak 40,000 BTU/Hour at 1,700°F. (927°C) – just through radiation loss. Oven temperatures that are excessive indicate that you are heating the room and your operators, not the work. Check the oven shell and door seals regularly for signs of degradation.

Each 1 Sq. Ft. of a well insulated main burner firebox chamber will leak 500 BTU/Hour at 1,700°F. – just through radiation loss. Our RT ovens do not have a main burner firebox chamber, therefore, no heat is wasted heating the main burner chamber or conducted to outside walls. The main burner fires directly into the radiant tube, yielding approximately 93% efficiency.

HEAT CLEANING ANALYSIS CONSULTATION

Free heat cleaning analysis consultation service helps manufacturing and process engineers improve the heat cleaning system performance and load integrity. A heat cleaning analysis kit includes a helpful guide to heat cleaning and monitoring procedures.

The (RT) gets hotter and cools down faster. There's no substitute for quick turnaround. (RT) is found in industries where an advantage exists to achieve faster heat-up while maintaining high quality and low operating cost. This represents a decrease of 50% heat-up time and fuel savings for the total heat cycle.

Not sure what a radiant + convection combo heat cleaning oven is exactly? How can it benefit you? If lower gas bills sound enticing, let us share with you our knowledge and expertise about radiant + convection heating system. We will provide you with all the information you need to make the best decision for your heat cleaning oven needs. We keep up-to-date on the latest in radiant + convection heat technology. Let us explain what radiant + convection heat is all about. Invest in the company that pays the highest dividends. The investment you make in an ACE burn-off oven pays you a greater return than any burn-off oven on the market. We have an unrelenting commitment to you, our customer, for as long as you own the oven.

You would expect a system that provides this level of efficiency to be more expensive. In fact, radiant heat is the most efficient and economical system available today. The new (RT) cleaning oven offers the oven at all price levels. Your long-term cost-savings benefits are unparalleled. ACE can provide you with a complete proposal for installing a (RT) oven in your facility, including an outline to show you how it will achieve dramatically improved fuel consumption performance.

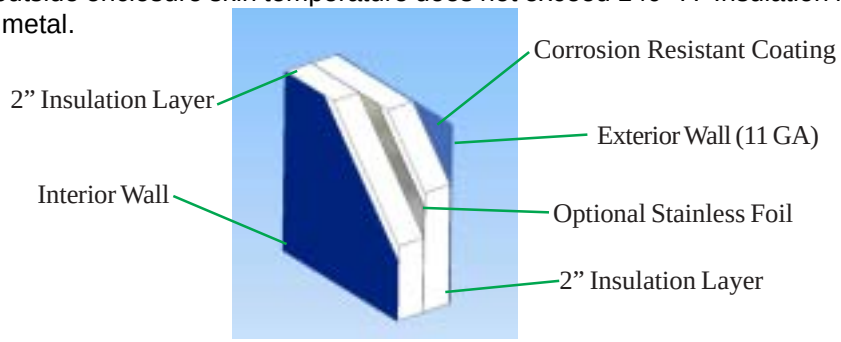
EXCLUSIVE FEATURES OF ACE HEAT CLEANING OVENS

SERVICE
ACE guarantees the original owner free service of the oven for the life of the unit.

REPAIR PARTS ARE AVAILABLE FROM STOCK
You may wish to order by Visa, Master Card or American Express credit cards.

OUTSTANDING REPUTATION & CRAFTSMANSHIP
ACE was established in 1919 and is the original manufacturer of Heat Cleaning Ovens since 1970.

5 LAYER WALL PROTECTION
Corrosion-resistant barrier inside oven 11 Ga. Steel enclosure adds many years to the useful life of the oven. 4" of 2,300° F. insulation, so that outside enclosure skin temperature does not exceed 140° F. Insulation is protected by 16 Ga. Expanded metal.



DURABILITY
The ACE System is built with only high quality, durable materials. 11 GA steel is used as compared to 14 GA used in other ovens.

DIAGNOSTIC PANEL
FM/IRI ovens supplied with Honeywell combustion flame safety controls which provides up to 127 diagnostic check points.

WATER SUPPRESSION SYSTEMS
A primary and back-up secondary water suppression systems supplied to prevent run-away fires.

SAFETY FEATURES
Fail Safe water check system, Pressure relief hatch(s), Door lock, High-Limit temperature switch, Over temperature water suppression system(s), Flame safety controls and Emergency shut-down.

ONE TOUCH CONTROL (OTC)
OTC is a new automatic self-adjusting control system. It monitors the combustible vapor in the oven and controls them at a safe level. Requires no program selection by the operator, thus removes the possibility of operator error. The OTC system automatically self adjusts the cycle time to the weight of the non-combustble and combustible load. Totally automatic process and shut down with the push of one button.

AUTOMATIC PROGRAMMED TIMING CYCLES
The oven program heat cycle runs only as long as necessary to clean the load and no longer. There is no manual timer for the operator to guess how long it takes to clean the load.

HEAT CLEAN WITHOUT POLLUTION
The integral afterburner chamber is designed to provide excess air for complete combustion of the smoke and odors. Discharges to atmosphere are harmless by-products of combustion, conforming to tough EPA air emission standards.

ACCESSORY ITEMS
We offer over 50 optional accessory items at low prices to meet your particular requirements.

MODELS
Over 30 standard models are available to you.

ACE HAS THE "HOLY GRAIL" IN HEAT CLEANING OVENS
The only oven on the market today that permits multitasking, such as heat cleaning, baking, heat treating, heat-up prior to welding , baking or incinerating paint filters and much more in one oven.

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Selecting the Right Burn Off Oven and Accessories

This descriptive literature may assist you in selecting a Burn Off oven with the most cost effective features for your specific application. You may need a single purpose oven with only a few options or a multi-purpose oven with many optional accessories. The Model RT has the capability of controlling uniform temperatures continuous duty from 100 to 1,100 F.

DESCRIPTION OF OVEN ACCESSORIES

OA-200 **STANDARD STACK - 10 Ft. of galvanized exhaust stack with 2,700°F rated insulation**.

OPTIONAL UPGRADES FOR FIRST 10 FT. OF EXHAUST STACK

OA-230 **Stainless 2,700°F (1482°C)**

ADDITIONAL 2 FT. SECTIONS OF EXHAUST STACK

OA-200 **Galvanized 2,700°F (1260°C)**

OA-230A **Stainless 2,700°F (1482°C)**

OA-1082 **THIRD WATER SUPPRESSION SYSTEM (UNDER CART)**

Two or more water spray nozzles located under the cart on the right and left side of oven enclosure. Quantity of nozzles varies with the size of oven. System is automatically activated when temperature under the cart exceeds 1,100°F (594° C). System is utilized to control temperature of burning residue under the cart. Required when processing large loads of rubber or urethane.

OA-1090 **EXHAUST STACK DIGITAL INDICATING TEMPERATURE CONTROLLER WITH AUTOMATIC SHUTDOWN SYSTEM** (REQUIRED BY EPA IN CA, IL, New England, NJ, PA)

Provides an indicating readout of temperatures in afterburner as required by EPA standards in certain states (i.e. 1,400°F. (742° C.) Minimum). Shortens burn cycle by shutting down the oven when the stack temperature indicates that the combustible load is done

OA-1092 **SYSTEM TO KEEP AFTERBURNER ON 0-10 HRS. LONGER THAN HEAT CYCLE**

A timing system to keep the afterburner on after the cycle timer turns off the main burner. Recommended to incinerate residual smoke, fumes and odors from ash after the heat cycle has ended.

OA-1095 **ELECTRIC SAFETY DOOR LOCK SYSTEM**

It is dangerous to open the oven door during the heat cycle. This system automatically locks the oven door when the cycle timer starts the burners. Recommended for safety of personnel and equipment.

OA-2550 **MANOMETER (PRESSURE INDICATING SYSTEM)**

The oven has a natural draft exhaust system which develops a negative pressure in the oven. The manometer indicates the amount of negative or positive pressure in inches of water column (W.C.). Do not attempt to operate the oven in a room with more than .05" (.127cm) W.C. negative pressure. This accessory is recommended to be sure the oven has sufficient exhaust.

OA-2600 **(FM) FACTORY MUTUAL COMBUSTION SAFETY EQUIPMENT SYSTEM**

OA-2650 **(IRI) INDUSTRIAL RISK INSURERS COMBUSTION SAFETY EQUIPMENT SYSTEM**

Required for companies that have factory mutual or industrial risk insurers, industrial equipment insurance combustion safety equipment components in the manifold system to meet FM and IRI standards. Components include high & low gas pressure switches, solid state trial for ignition & purge system, etc.

OA-2670 **HONEYWELL KEYBOARD DISPLAY MODULE**

Capacity to Display up to 127 combustion faults

OA-2680 **AUTOMATIC GAS PURGE SYSTEM**

Recommended for ovens equipped with Factory Mutual (FM) or (IRI) combustion safeguard system. It will eliminate hard starting of an oven that has not been operated for a long period of time

OA-140 **11 GA. STEEL GUARDS INSTALLED FROM TOP TO BOTTOM ON L., R. & REAR INSIDE WALLS**

OA-510 **ADDITIONAL WATER NOZZLES INSTALLED IN PRIMARY WATER SYSTEM**

OA-512 **ADDITIONAL WATER NOZZLES INSTALLED IN SECONDARY WATER SYSTEM**

Two or more additional water nozzles installed in the primary or secondary system to control ramp & dwell setpoints. Recommended for highly combustible loads such as paint filters, rubber or urethane.

OA-520 **BY-PASS VALVE INSTALLED TO MANUALLY TURN ON PRIMARY WATER SYSTEM**

OA-522 **BY-PASS VALVE INSTALLED TO MANUALLY TURN ON SECONDARY WATER SYSTEM**

Provides operator the option to manually turn on primary or secondary water system to suppress combustion and prevent run-away fires. Recommended as a back-up system in a dangerous emergency.

OA-525 PRE-PURGE VENTING SYSTEM
Four oven volume air changes. Purges solvent build-up prior to ignition. Burners ignite after purge ends.

OA-535 LOSS OF ELECTRIC POWER BATTERY PACK BACK-UP WATER SPRAY SYSTEM
Automatically turns on water when there is a loss of electric power. When there is a loss of electric power, the primary water spray system turns on over 300°F (149°C) and shuts off under 300°F. to cool the load to prevent run-away fires, smoke, vapors and flame from going up the stack. This system automatically shuts off the water spray system when the primary chamber cools below 300°F., to prevent flooding in the oven.

OA-550 AUXILIARY UNIT TO DE-ACTIVATE & RE-ACTIVATE PRIMARY & SECONDARY WATER SYSTEMS
Loads which contain burning hydrocarbons require water to maintain temperatures during the heat cycle. However, some loads contain no burning hydrocarbons and do not require water to maintain oven temperatures. This accessory is very useful for certain bonding and heat treating applications with no burning hydrocarbons. This auxiliary unit interfaces with the temperature controller to automatically de-activate & re-activate the primary & secondary water systems on any one or more of the 8 recipes.

OA-560 WATER SUPPLY BACK-UP SYSTEM ASSEMBLY WITH TANK, PUMP & VALVES
Water pressure of 30 to 50 P.S.I. is required for the primary and secondary water spray systems to maintain setpoint temperatures. Without proper water pressure, there is a risk of run-away fires. This back-up system eliminates this risk by automatically supplying water under pressure when the water supply pressure to the oven drops lower than 30 P.S.I. (2.1 KSC).

OA-710 3 TRAYS ON FLOOR & 2 DEFLECTORS UNDER CART
Recommended primarily for catching large quantities of residual ash when burning paint filters, rubber or urethane.

OA-800 TEMPERATURE RECORDER & 2 THERMOCOUPLES
OA-805 TEMPERATURE INDICATOR & 1 THERMOCOUPLE

OA-920 VAPOR BARRIER COATING ON INSIDE ENCLOSURE & EXHAUST STACK (FIRST 10FT.)
OA-921 VAPOR BARRIER COATING ON ADDITIONAL EXHAUST STACK
Protection of oven's steel enclosure from chemical actions. Recommended for loads such as rubber or urethane which may contain materials (i.e. chlorinated polymers) which could cause corrosion of the steel.

OA-930 STAINLESS STEEL VAPOR BARRIER
Inside enclosure - protection of steel enclosure from moisture & chemicals.

ADDITIONAL ACCESSORIES AVAILABLE — CALL ACE FACTORY FOR DETAILS:
OA-311 Stainless Weather Cap
OA-321 StainlessStorm Collar
OA-331 StainlessRoof Flashing
OA-410 Gas Regulator For Pressure Over 1/2 PSI
OA-412 Gas Pressure Gauge
OA-500 Spare Stainless Water Nozzle
OA-515 Water Line Strainer
OA-540 Audible Alarm For Over-Temperature Condition
OA-720 Additional Cart
OA-730 Special Cart
OA-810 Transformer For Supply Voltages Other Than 120V 1 Phase, 60Hz
OA-815 System To Automatically Start Oven At A Designated Time
OA-910 Weather Guard On Burners To Prevent Damage & Outside Use