

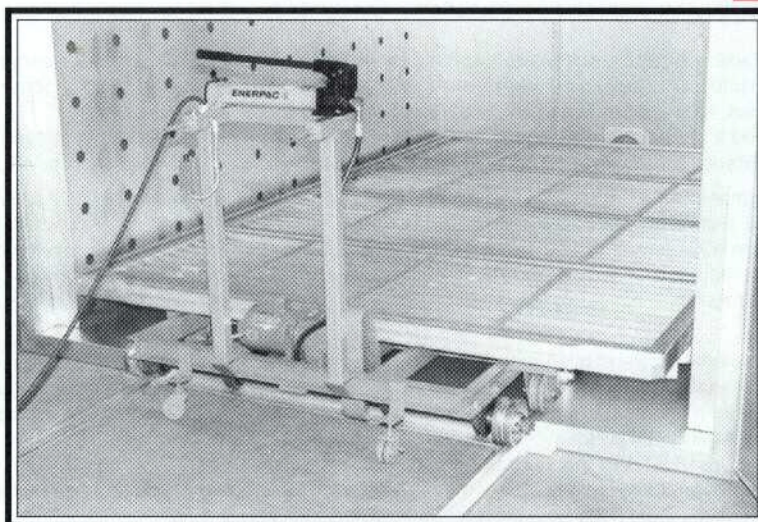
STEELMAN BURN-OFF OVEN FEATURES

FEATURES	DESCRIPTION
AUTOMATIC PROCESS CONTROL (APC) US PATENT (5,189,963)	<p>APC is the ultimate in control systems for a burn-off oven. The purpose of the control system is to provide the quickest cleaning cycle time while protecting the product, operator and the workplace. The APC system automatically adjusts the required cycle time to the weight of the load and the amount of combustible material on the parts; thus, APC provides the shortest possible cycle time for the load being processed. There is no under or over processing with the APC. The control system requires zero input from the operator. Digital temperature controllers are programmed to respond to the rate of temperature change in both the oven and the afterburner; rapid temperature changes are caused by exotherms and excessive combustible vapor levels. The controllers activate primary water sprays to control the process at a safe rate. Large backup sprays are activated within seconds if the primary sprays are not adequate. In the event that primary and backup water sprays are not able to control a rapid temperature rise, the oven burner will shut down, the afterburner will stay on, and the water sprays will continue to operate. If there is an afterburner failure, or if there is a momentary power failure, then water sprays are also activated to cool the oven down. This will prevent smoke emissions from the stack. For better temperature control, the APC fires the burners high and low instead of On and Off. The frequency of lighting failures and wear on the burners will be reduced. The APC will not allow the oven to turn off while any combustible materials remain in the oven. The APC will turn the oven off automatically when the load is complete. The APC is a significant improvement over cycle time control or ramp & soak control.</p> <ul style="list-style-type: none"> - APC will prevent fires, part damage & operator injury. - APC provides faster and safer processing than other control systems. - APC is not a "Ramp & Soak" control. "Ramp & Soak" control requires that exact cycle profiles be programmed in the controller and that the operator be able to select the appropriate program for the load to be processed. APC will automatically adjust to the load and requires no program selection.
UNIQUE TOP / DOWN HEATING DESIGN US PATENT (5,351,632)	<p>Top / Down Heating is a unique patented exterior multi-chamber design in which the oven is heated from the top to the bottom. The primary (oven) burner releases heat in the top of the oven and the afterburner removes cool air and combustible products from the bottom. The positioning of the burners is the reverse of other burn-off ovens.</p> <ul style="list-style-type: none"> - Parts and carts aren't blasted with hot gases; thus, they are less likely to be damaged. - Combustible smoke naturally sinks to the floor in a burn-off oven where it is continuously removed; thus, fires are prevented and efficiency is improved. - 100% of heat passes through parts before being removed; thus, efficiency & cycle times are better. - Exterior chambers eliminate damage during loading and unloading; thus, maintenance is reduced.
NFPA / FM / UL STANDARDS	<p>The Steelman burn-off oven is built to the standards of the National Fire Protection Association (NFPA) where applicable and Factory Mutual Insurance (FM). Other standards by Industrial Risk Insurers (IRI), Canadian Gas Association (CGA), etc., can be substituted at small charge (contact factory). Consult the factory for the respective standard. The NFPA & FM standards include such features as a high/low gas pressure switch, purge timer, door switch, main safety shutoff valves for ovens over 400,000 BTU/Hr, and others. Our control panels are UL listed.</p>
INDUSTRIAL QUALITY CAST IRON BURNERS	<p>Also, unlike other burn-off oven manufacturers, Steelman uses industrial quality cast iron burners. These burners are built to significantly greater durability and reliability standards than the light duty sheet metal burners used by other manufacturers. Also, these industrial quality heavy duty burners are available with inputs exceeding 1 million BTU/Hr.</p> <ul style="list-style-type: none"> - Increased BTU/Hr inputs contribute to decreased cycle times. - Improved durability & reliability means less down time, less service and lower maintenance cost. - Industrial Quality Burners provide lower NO_x and CO emissions.
HIGH FIRE AFTERBURNER	<p>A high fire afterburner is included standard with every oven, allowing the afterburner to rapidly heat up and maintain a minimum of 1,500°F during operation. This assures that the afterburner will always be ready to process vapors produced in the oven. Other systems that don't incorporate a high fire burner may emit smoke and odor while the afterburner is heating up. This benefit also allows the oven to process at a maximum rate. The system is deactivated above 1500°F in order to conserve energy.</p> <ul style="list-style-type: none"> - This feature is environmentally preferred and already required in some states. - The high fire afterburner will reduce cycle times.
CONSTRUCTION SECOND TO NONE	<p>All Steelman burn-off ovens undergo the same meticulous fabrication. The construction starts with an angle iron frame and a 14 gauge CRS exterior. The floor is built out of 4" channel and insulated with 1/2" ceramic fiber and 3 1/2" of refractory cement. The oven includes a five layer protection system in the walls & ceiling: two layers protect against corrosion, two layers insulate, and the aluminized perforated steel covers the entire interior eliminating mechanical damage. A pressure relief hatch is located on the top of the oven to prevent operators from being harmed in the event of an ignition. The afterburner chamber and exhaust stack are constructed of stainless steel and lined with a 1/2" ceramic sleeve and a 1 1/2" ceramic blanket. Finally, Steelman burn-off ovens include an exclusive ergonomically designed track system. A short section of track is allowed to fold on its side in order that the oven doors can be opened and closed over the track.</p>
EXHAUST INSTALLATION KIT INCLUDED	<p>Exhaust kits include 14 linear feet of exhaust stack over the top of the oven. Also included are rain cap and flashing. Stack lengths are constructed of stainless steel and lined with ceramic fiber. Additional stack lengths, elbows, dampers and other accessories are available from the factory.</p>

MISCELLANEOUS OPTIONS

OPTION	DESCRIPTION	OPTION	DESCRIPTION
POWERED CART MOVER	Motorizes loading & unloading. Prevents operator injuries.	AUTOMATIC DOOR LOCKS	Prevents oven from being opened during processing.
IRI or CGA OR SPECIAL CONTROLS	IRI or CGA Specifications and/or other special requirements.	CONTROLS LOCATION	Controls can be located remote or opposite side of oven.
HEAVY DUTY BASKETS	Heavy duty baskets for small parts & fork lift loading.	BATTERY BACKUP WATER SPRAY	Battery backup water sprays cool down load if power loss occurs.
EXHAUST PARTS	Extra stack length, elbows, etc. Also stack dampers available.	START-UP SUPERVISION SERVICE	Supervision of installation startup and/or operator and maintenance training.

POWERED CART MOVERS - (PCM)



POWERED CART MOVER

(Option - PCM)

- Powered Cart Movers are Used with Track Carts
- Operates on 120V / 1Ph Service
- Available with all Size Ovens & Carts
- Moves Loads up to 50,000 lbs



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