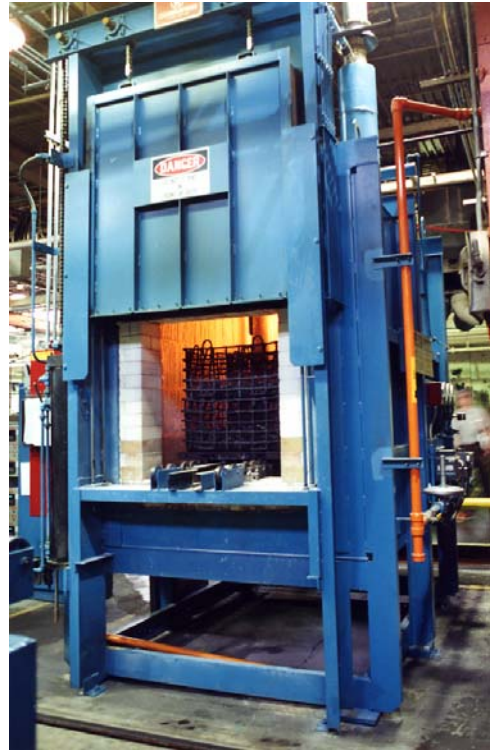


BOX FURNACE (BATCHMASTER®)

The Batchmaster® furnace is a flexible single chamber furnace (oven) design that can be customized to meet many processing requirements. Furnaces can be provided in electric, direct fired, and indirect gas fired configurations to meet specific processing requirements. Retorts can be incorporated within the design when special processing atmospheres are required.

The furnace design is typically loaded through a single vertically opened door, but the furnace can be configured as a lift cover, tilt top or with multiple doors.

The box furnace can be combined with loading cars, companion quench tanks, and washers to form complete heat treating cells.



INSTALLED BASE

Surface Combustion has an installed base of over 1000 single chamber box furnaces.

TYPICAL PROCESSES

Normalizing, hardening, stress relieving, carburizing, forging, annealing

PROCESSING ATMOSPHERES

Endothermic (RX®), exothermic (DX®), nitrogen, air, argon, flue products

MATERIALS PROCESSED

Steel, stainless steel, cast iron

PRODUCTS PROCESSED

Castings, forgings, stampings, aerospace components, bars, rod coil

STANDARD SIZES

- Standard widths between 24" and 72".
- Standard loading heights between 24" and 72"
- Standard loading weight up to 20,000 pounds
- Custom size and weights available upon request

TYPICAL DESIGN ALLOWANCES

- Ceramic fiber insulating systems
- Maximum operating temperatures up to 2400°F
- Electric, direct gas fired (recuperative and regenerative), and radiant tube systems available
- Refractory or alloy hearth systems
- Hydraulic cover lift and rotate systems available
- External cooling systems available to reduce cycle
- Companion atmosphere generators, quench tanks and furnace loaders available
- Controls meeting the requirements of AMS-2750