



INTEGRAL QUENCH FURNACES

RELIABILITY, EXPERTISE,
SERVICE & SELECTION

Gasbarre Integral Quench Furnaces are batch type units equipped with recirculating fan, radiant tubes, enclosed vestibule and integral quench tank and compatible with many existing furnace lines. The furnaces are capable of numerous processes including annealing, neutral hardening, carburizing, carbonitriding, and other heat treating processes where a controlled environment is required during the heating and quenching portion of a cycle. As an option, the furnaces can be configured for ferritic nitrocarburizing.

STANDARD SIZES

LOAD SIZE (IN.)			GROSS LOADING (LBS.)
Width	Length	Height	
24	36	24	1,500
30	48	30	3,000
36	48	36	4,000
36	72	36	6,000

Custom engineered sizes available upon request

FEATURES

Heating: Multiple Energy Efficient Systems Featuring Electric Resistance Elements and SCR Control or Gas Fired Recuperated Burners; All Systems Come Complete with Radiant Tubes

Temperature Operating Range: 1500°F to 1750°F
(Optional 1500°F to 1900°F)

Temperature Uniformity: $\pm 25^{\circ}\text{F}$

Insulation: High Efficiency Packages that Include Refractory Brick and Ceramic Fiber Modules

- Meets AMS 2750 and CQI-9 Requirements
- PLC Controls All Furnace Automation
- HMI Operator Interface Provides a Single Location to Create, Select and Run Recipes as well as Control and Monitor All Furnace Functionality

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MADE IN THE USA

FEATURES, CONT'D

- Electronic Process Gas Flow Control using either Endothermic or Nitrogen/Methanol along with Natural Gas, Air, and/or Ammonia
- Carbon Potential Control via Carbon (Oxygen) Probe
- Plug Mounted, Air-Cooled, Indirectly Driven Circulating Fan Assembly
- Agitators Controlled by a VFD Enable Variable Quenchant Speeds
- Quench Oil Cooling Via an Air Cooled Heat Exchanger
- Pneumatically Operated Vertical Lift Doors and Quench Elevator
- Heavy Duty Internal Mechanism Automatically Transfers Loads between the Quench Elevator and Heating Chamber
- Flame Curtain and Atmosphere Outlet Port Each Incorporate Flame Supervision
- Excellent Front Quench Adjustable Door Seal
- Bung Mounted Components (Circulating Fan, Agitators, Radiant Tubes, etc.) ease Maintenance and Replacement

COMMON CUSTOMIZATION FEATURES

- Fully Compatible with Existing Equipment
- Upper Atmosphere Cooling (Top Cool) Chamber
- Hot Oil Quenching
- Insulated Quench Tank
- Quench Oil Filtration System



Integral Quench Furnace

AVAILABLE COMPANION EQUIPMENT

- Temper Furnaces
- Spray and Dunk Washers
- Endothermic Gas Generators
- Charge Cars
- Scissors Lift Tables
- Holding Stations
- Cooling Stations



Temper Furnaces



Endothermic Gas Generators