

Horizontal Quench

Aluminum Heat Treat



Standard Features:

- Meets all Aerospace, MIL & Automotive specifications
- Fastest heat-up & recovery rates
- Gas(Direct & Indirect) and electric versions
- Variable speed hoist system
- Heavy plate construction
- Accepts heavy loads
- Energy efficient ceramic fiber insulation
- NEMA 12 Control Panel (machine-mounted)
- Sliding positive sealing door systems
- PLC/HMI for process automation
- High volume recirculation air system
- Front quench tank(water/glycol) with load/unload station



Additional Options:

- Data acquisition
- Quench tank heating/cooling
- Rinse tank
- Filtration systems
- Glycol separation systems
- Automatic Shutdown Circuit
- UL/CE Listed Electrical Panel
- Special temperature uniformities
- Hydraulic hoist systems for heavy loads
- Age Ovens
- Insulated quench tanks
- Spare Parts
- Field installation, installation supervision and commissioning
- Work platforms/access ladders

ITS Horizontal Quench Aluminum Solution Heat Treat Furnaces meet all industry specifications including AMS, MIL, NADCAP & CQI 9.

Proprietary air recirculation systems and lightweight ceramic fiber insulation systems ensure the fastest heat-up and recovery times available.

ITS specializes in large volume workspaces with lengths to 40' and heavy loads with sizes to 20,000 lbs.

All ITS Horizontal Quench Furnaces are designed to operate with tight uniformities from 300°F to 1200°F for maximum flexibility to allow for aging and annealing. Complete factory testing prior to shipment and full installation & start-up services ensures a smooth project from start to finish.

Contact ITS today for all your horizontal quench furnace and heat treat equipment needs.

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HORIZONTAL QUENCH FURNACE SIZES and CAPACITIES

| Model Number | Chamber Dimensions | | | Outside Dimensions | | Load LBS (kgs) | Heater INPUT (kw's) | Burner INPUT (BTU's) | Airflow CFM | Temp. Uniformity (+/-) |
|--------------|--------------------|---------------|---|--------------------|-----------------|------------------|---------------------|----------------------|-------------|------------------------|
| | | INCHES/METRIC | VOLUME | | INCHES | | | | | |
| HQF-343 | W | 36" / 915mm | 36 ft ³ (1.02 m ³) | W | 62.5" / 1588mm | 3,000 (1,350) | 36 | 250,000 | 4800 | 3°F |
| | D | 48" / 1219mm | | H | 63.5" / 1613mm | | | | | |
| | H | 36" / 915mm | | L | 69" / 1753mm | | | | | |
| HQF-363 | W | 36" / 915mm | 72 ft ³ (2.04 m ³) | W | 86.5" / 2197mm | 4,000 (1,825) | 72 | 500,000 | 5400 | 3°F |
| | D | 72" / 1829mm | | H | 87.5" / 2223mm | | | | | |
| | H | 36" / 915mm | | L | 81" / 2057mm | | | | | |
| HQF-444 | W | 48" / 1219mm | 64 ft ³ (1.81 m ³) | W | 86.5" / 2197mm | 4,000 (1,825) | 72 | 500,000 | 5400 | 3°F |
| | D | 48" / 1219mm | | H | 87.5" / 2223mm | | | | | |
| | H | 48" / 1219mm | | L | 105" / 2667mm | | | | | |
| HQF-554 | W | 60" / 1524mm | 100 ft ³ (2.83 m ³) | W | 86.5" / 2197mm | 6,000 (2,725) | 144 | 800,000 | 7500 | 3°F |
| | D | 60" / 1524mm | | H | 87.5" / 2223mm | | | | | |
| | H | 48" / 1219mm | | L | 129" / 3277mm | | | | | |
| HQF-644 | W | 72" / 1829mm | 96 ft ³ (2.71 m ³) | W | 110.5" / 2807mm | 6,000 (2,725) | 144 | 800,000 | 7500 | 3°F |
| | D | 48" / 1219mm | | H | 111.5" / 2832mm | | | | | |
| | H | 48" / 1219mm | | L | 105" / 2667mm | | | | | |

Horizontal Quench Furnace Features include:

- Application specific insulation material, airflow management, and custom programming
- Recirculation fans with high efficiency motors to reduce energy consumption
- Recirculation ductwork designs provide precise airflow to specific areas of the product resulting in smaller foot print furnaces thus reducing utility and factory space costs
- High-efficiency (gas or electric) heat sources to reduce energy costs
- Robust structural furnace frames and component supports
- Design considerations for easy access to process areas and furnace components
- Heavy Duty quench tank construction
- Manual and automatic quenching options
- Pre-packaged optional quench tank heating/cooling systems
- Private labeled and purchased components meet UL, UR, and CE standards. Programmable controllers with HMI (Human Machine Interface)
- NEMA style control panels
- Factory tested to ensure on time delivery and field start up.
- 24/7 factory direct technical service and spare parts group.