

# **HORIZONTAL QUENCH SYSTEM**

# **For Solution Heat Treating Aluminum**

A cost effective alternative to a drop bottom furnace that optimizes floorspace, with quench times as low as 7 seconds, and load ratings up to 8,000 lbs or more! The horizontal quench system has maximum temperature ratings up to 1,250° F and provides excellent temperature uniformity capable of meeting the strictest Aerospace and Automotive requirements.

# **Benefits:**

- Lower capital cost than a comparable drop bottom furnace, with a significantly smaller footprint
- Quench times as low as 7 seconds
- Load sizes up to 12' long and larger
- **High load capacity** up to 8,000 lbs or more, for castings, extrusions, sheets and others
- Automated quench process for a streamlined production process and consistent results
  - Designs that meet stringent specifications such as AMS2750 and CQI9
  - Floor level design for convenient, safe maintenance access, unlike drop bottom furnaces, which are elevated
  - Fully factory assembled and tested prior to shipment to reduce installation and start-up delays (customers are encouraged to witness final equipment testing at Wisconsin Oven)
    - Includes the DataSense<sup>™</sup> Technologies IoT Based Performance Monitoring System



Available with DataSense™ Technologies IoT Based Performance Monitoring System





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## **Standard Operating Procedure:**

Parts are loaded on a work grid located on the rollers of the quench platform. A pusher/extractor mechanism pulls the load into the furnace for heat treating. After the heating cycle is completed, the vertical lift door opens and the extractor mechanism pushes the load onto the quench platform, and quenches the load.

### **Standard Features:**

- Fully automated operation
- Programmable temperature controller for precise thermal operation
- High-capacity recirculation blower
- High-flow tank agitation system provides maximum heat transfer from the load to the quench fluid
- Direct and indirect gas fired or electrically heated
- Combination airflow through oven chamber
- High-temperature, alloy work grid
- Standard temperature uniformity of +/- 10° F, tighter tolerances available upon request
- Pneumatic or electric operated vertical lift oven door and quench platform
- FM, NFPA, NEC, OSHA compliant
- Shipped completely piped, wired, fully tested and certified

### **Available Options:**

- Compliance to AMS2750, CQI-9 and other specifications
- Load table or lift table to help load the basket onto the system
- Digital process recorder
- Data acquisition system
- Load Baskets
- Energy efficient E-pack™ upgrade
- Dual tier quench platform to allow simultaneous heat treating and quenching
- Quench tank cooling, heating or filtration
- Polymer quench, with rinse tank
- Unique solutions available (consult with factory)



