

VERTIQUENCH®

Drop Bottom Quench Furnace for Aluminum Heat Treatment



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Drop Bottom Furnaces for Aluminum Heat Treating

INDUSTRIES:



Aerospace Automotive

PROCESSES:



Solution Heat Treatment Quenching Aging SECO/WARWICK is a full-service integrator of aluminum processing technologies serving the worldwide aluminum industry with efficient lines that perform with exceptional temperature uniformity and unique charging techniques to fit the most demanding applications.

The company's furnaces provide the world's best implementation of heat treatment processes, top quality and technical service and support.



Significant technical improvements have been implemented resulting in numerous drop bottom furnaces installations. As a result, this equipment has become a top product for SECO/WARWICK.

VertiQuench® Drop Bottom Furnaces provide an affordable solution for demanding automotive and aerospace applications in aluminum solution heat treatment, quench, and aging.



- Extremely tight temperature uniformity resulting from proven airflow innovations
- Fast, complete load immersion as short as 5 seconds
- AMS2770 compliant quench transfer times
- Low consumption of utilities
- The system meets AMS2750 requirements

This innovative AMS compliant technology enables very fast and full load immersion as short as 5 seconds. As the VertiQuench® name implies, the process provides very fast vertical quenching. The heat-treated material is dropped into water or polymer quenching tanks located directly under the furnace.

VertiQuench® provides solution heat treatment followed by quenching and artificial aging for precipitation hardening of products. The furnaces can be supplied in one complete system conforming to AMS aerospace standards, and meeting the tight requirements in terms of temperature uniformity, restrictions for processing time in each step, and for other parameters.

VertiQuench® provides an optimal heat treatment technology for aluminum alloy extruded and drawn porthole or seamless tubes of 2xxx, 6xxx, and 7xxx series alloys in hard tempers, since it provides the shortest quenching time and produces the highest mechanical properties of treated extrusions.

SECO/WARWICK GROUP a leading global manufacturer of heat treatment furnaces and equipment

SECO/WARWICK is a technological leader in innovative heat treatment furnaces. Expertise includes end-to-end solutions in 5 categories: vacuum heat treatment, atmosphere, and aluminum thermal processing, controlled atmosphere brazing of aluminum heat exchangers and vacuum metallurgy. SECO/WARWICK Group with 9 companies located on three continents with customers in nearly 70 countries, has its production facilities in Poland and China. In addition, the Group includes a number of service and sales offices in such countries as Germany or Russia. The company provides standard or customized state-of-the-art heat processing equipment and technologies to leading companies involved in the following industries: automotive, aerospace, electronics, tooling, medical, recycling, energy including nuclear, wind, oil, gas, and solar and production of steel, titanium, and aluminum.

