

# VertiQuench

Drop Bottom furnace for aluminum heat treatment



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#### **INDUSTRIES**

- / Aerospace
- / Automotive



## **PROCESSES**

- / Solution Heat Treatment
- / Aging
- / Annealing
- / Stress relieving
- / Controlled cooling
- / Controlled heating

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.





### **BENEFITS**

- / 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.



