



**SECO/WARWICK**

INVENTION MEETS RELIABILITY

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.

## UNIVERSAL CAB BATCH FURNACE

High brazing quality for low volume producers

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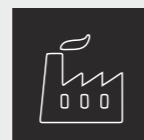
# UNIVERSAL CAB BATCH FURNACE

The Universal CAB Batch Furnace is designed to braze the widest variety of heat exchangers in horizontal or vertical position depending on the product design requirements. It operates on a part-time basis. The furnace can be brought up to brazing temperature from ambient and conditioned to a proper atmosphere in a very short time. This two chambers batch system allows for variable heating and cooling rates, depending on product requirements.



Horizontal load

The design of the Universal CAB Batch furnace is prepared for the future upgrading to the three chamber equipment. This is the most economical way to increase the output of the existing CAB system.



## INDUSTRIAL APPLICATION

- For all types aluminum heat exchangers
- Horizontal and vertical brazing availability
- Ideal for low volume HEX producers



## MAIN ADVANTAGES

- Highest flexibility
- Short preparation time (2-3 hours)
- Low Nitrogen consumption
- High brazing quality:
  - Clean atmosphere – below 20ppm of Oxygen
  - Temperature uniformity
  - Sharp heating profile
  - Repeatable brazing process
- Compact design
- Easy for installation and use

## VACUUM PURGING SYSTEM

- Two stages vacuum pumping
- Vacuum down purging to the pressure lower than 0,05 mbar corresponds with Oxygen content 10ppm
- One time refill by Nitrogen – atmosphere quality below 20ppm.
- Dedicated for the Plate&Bar heat exchangers
- Prepared for the brazing with fluxless and fluxfree technology

## BASIC TECHNICAL PARAMETERS

- Brazing time\* (in brazing chamber) 10 - 40 minutes
- Cycle time\* (including purging, cooling) 30 - 70 minutes
- Standard Size 1100 x 1100 x 1500 mm
- Load mass 350 kg
- Other sizes and load mass versions available
- \* time depends on the type and mass of the product



Vertical load