SECO/WARWICK

INVENTION MEETS RELIABILITY

# FIRE RESISTANCE TEST FURNACES

Laboratory furnace for fire resistance tests

# FIRE RESISTANCE TEST FURNACES

**Unique Equipment for special tasks:**
**Fire Resistance Test Furnaces.**

## INDUSTRIES

- Automotive
- Maritime industry
- Construction industry

## TECHNOLOGIES

- Construction materials
- Building materials

## PROCESSES

- Gas heating systems

In the production of atmosphere heat treatment solutions, SECO/WARWICK uses extended experience and state-of-theart technology to simplify installations, reduce investment costs, and reduce process of utilities consumption. Modern technologies have been implemented in the production of laboratory furnaces for fire resistance testing. Technical solutions of SECO/WARWICK furnaces allow our partners to meet the strictest technical requirements and modern technologies, that give them competitive advantage in the industry. Investing in laboratory furnace to conduct fire resistance tests is like being one step ahead.

Fire Resistance Test Furnaces in a variety of configuration (horizontal, vertical or combined) for fire resistance test for suspended ceilings, viewfinders, walls, columns, etc., are

designed according to specific heating curves. Laboratory chamber furnaces stands are the optimal solution in the implementation of structural fire resistance tests of bulding and ship constructions, horizontal and vertical components, and safes. The work of the furnace is fully automated, controlled by PLC (programmable logic controller), which simulates the fire course and provides great flexibility in terms of adaptation to rapid and effective changes in the parameters of a given research.

Fire resistance test chamber flexibility is worth emphasizing (i.e. the ability to quick and efficient adaptation to the type of study). It is equipped with viewfinders to observe the behavior of the test element inside the test chamber, the visualization, data archiving and reporting system, enabling static and dynamic load simulation during fire tests.

Technical solutions of SECO/WARWICK furnaces ensure the implementation of specific fire resistance tests of all structures. Devices can be adapted to the specific needs and demands of our customers as well. The diversity of customer requirements necessitates the need of implementing the design of the equipment that will carry the process out in a way that provides maximum flexibility.

## FEATURES

- Flexibility, ability to quick and efficient adaptation to the type of the reseach.
- Viewfinders observing the behavior of the test element inside the test chamber, the visualization, data archiving and reporting system, enabling static and dynamic load simulation during fire tests.
- Fully automated (controlled by PLC programmable logic controller) simulation of the fire course.
- Equipped with a waste gas cleaning system.
- Simulation of a controlled fire source used for fire resistance testing of vertical and horizontal elements of building structures at the temperature up to 1150°C.

## BENEFITS

- Automatic and manual control.
- Maximum use of the research stands.
- The ability to quick and effective adaptation to the different types of research.
- Research stands with a large readable display device showing the current time, stopwatch, data number of tests.
- Alarm signaling.
- Visors for observation of the behavior of the tested item inside the test chamber.
- Visualisation, archiving, and reporting data system.
- The security system switching the heating system off.

## OPTIONS

- Fire resistance of non-load bearing elements.
- Fire resistance of load-bearing elements.
- Fire resistance of elements of the installation.
- Fire resistance of doors and shutters.
- Fire resistance of ceilings, decks and bulkheads of ships.
- Fire resistance of cabinets used for storage of media, documents, flammable liquids, and other valuables.

# SECO/WARWICK
## Invention Meets Reliability

SECO/WARWICK is the 1st Choice Supplier
of Solutions for Heat Treatment and Metallurgy.

We create innovative products that provide our customers with reliable, safe and environmentally friendly solutions for heat treatment and metallurgy and ensure the economic efficiency of their businesses. 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 7 companies located on 3 continents, has customers in nearly 70 countries with more than 5000 deployed solutions. The company provides standard or customized state-of-the-art heat processing and metallurgy equipment and technologies to leading companies in the following industries: automotive, aerospace, electronics, tooling, medical, recycling, energy including nuclear, wind, oil, gas, solar and production of steel, titanium, and aluminum.

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