Laboratory furnaces are the optimal solution in the implementation of structural fire resistance tests of building and ship constructions, horizontal and vertical components and safes. The furnace’s work is fully automatic, controlled by a programmable logic controller (PLC).

The available furnace solutions offered by SECO/WARWICK EUROPE S.A. are:

- Chamber furnaces with gas heating system
- Chamber and multi-chamber furnaces with any configuration

Laboratory furnaces are used to test the following structural elements:

- 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 documents, storage media other valuables and flammable liquids

Technical solutions of SECO/WARWICK EUROPE S.A. 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 out process in a way that gives maximum flexibility.
Research stands allow you to work according to the following heating curves:

- Standard curve (EN 1363-1)
- External fire exposure curve (EN 1363-2)
- Slow heating curve (EN 1363-2)
- Hydrocarbon curve (EN 1363-2)
- Tunnel curve
- Heating curve of smoke dampers (T = 300 ºC)
- Curve heating of raised floors (T = 500 ºC)
- Heating curve of smoke dampers (T = 600 ºC)

Benefits of fire resistance testing laboratory furnaces:

- Automatic and manual control
- Maximum use of research positions
- The ability to quickly and effectively adapt to the different type of research
- Research stands with a large readable display device showing the current time, stopwatch, date and number of tests
- Alarm signaled
- Visors for observation of the behavior of the tested item inside the test chamber
- Visualization, archiving, and reporting of data system
- The security system switching off the heating system when exceeding the limit temperature