TUBULAR FURNACE CONTROLLED ATMOSPHERES

DRY AND HUMID

AET TECHNOLOGIES

This universal horizontal multi-process tubular furnace for controlled atmospheres (dry and humid) stands out for the unparalleled quality of the results it delivers. It is particularly suited for demanding research laboratories seeking a high-performance, reliable solution compatible with long-duration thermal testing and heat treatment. The quality and sturdiness of its construction ensure a long service life, low maintenance, and ease of use.



ABOUT US

AET Technologies specializes in the design and manufacture of custom and standard thermal equipment for research and industry.

Our expertise in heating engineering and mechanical heat transfer, gas and atmospheric management, vacuum systems, automation, and control systems enables us to provide solutions perfectly tailored to your needs.

Whether you need standalone or integrated furnaces for production or R&D, we deliver turnkey equipment thanks to our unique engineering capabilities and proven experience.

David D'ATTOMA
Sales Director

A modular, universal tubular furnace

Designed for complete modularity, this vertical or horizontal multi-process tube furnace is available in different versions through the addition of a process tube tailored to specific temperatures, atmospheres, and loads.

A high-performance control system

Our system provides: a fast and accurate response, temperature stability (±1°C), reduced errors, and optimized energy consumption.

PC Screen HMI 22 inches

This control system provides comprehensive management of the equipment. It offers users user-friendly and secure process data control, configuration, acquisition, and archiving.

AET GROUP

Let's innovate together to reinvent today's materials and discover tomorrow's.

AET GROUP
73D rue Général Mangin
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TUBULAR FURNACE
CONTROLLED ATMOSPHERES
DRY AND HUMID

Made in France

After-Sales Service

Recognition of Excellence

Technical specifications*

Réf*	UTFH-1700 -01- 450-50	UTFH-1700 -03- 450-85	UTFH-1700 -03- 600-85
Heating zones	3	3	3
Max Temp °C pure alumina tube	1,700°C in an atmosphere – 1,500°C in a vacuum		
Average heating rate of pure alumina tube	5°C/min	5°C/min	5°C/min
Max Temp °C SiC tube	1,400 °C in an atmosphere – 1,200 °C in a vacuum		
Average heating rate of SiC tube	10°C/min	10°C/min	10°C/min
Diameter Effective inner diameter (mm)	50	85	85
Heating Length (mm)	450	450	600
Length process tube in air (mm)	700	700	850
Tube length for process under atmosphere (mm)	1150	1150	1300
Assembled on frames H x W x D (mm)	1700 x 700 x 1500	1700 x 700 x 1500	1700 x 700 x 1500
Height of the working tube axis (mm)	~1400	~1400	~1400
Uniform length (mm) <±5°C	> 300	> 300	> 450
Maximum Power (kW)	8	8	8
Voltage Power Supply	430V (3 phase + N + T) 50Hz	430V (3 phase + N + T) 50Hz	430V (3 phase + N + T) 50Hz
Total weight	< 500 Kg	< 500 Kg	< 500 Kg

* Subject to technical changes





Key Features and Optional Functions

- Max. 1,700 °C in a gas atmosphere or at atmospheric pressure
- Max. 1,500 °C under vacuum
- 3 heating zones
- Effective inner diameter: 50 to 85 mm
- Max. power: 8 kW, three-phase
- Dry or wet process gases: N_2, Ar, N_2/H_2 5%, Ar/H_2 5%, O_2, dew point from −30 °C to +70 °C (max. water flow rate: 1g / hour)
- Primary or secondary vacuum pumping system
- Optional exhaust gas treatment via post-combustion (flare without carrier gas)
- Temperature uniformity: ±5 °C
- Type S or Type B thermocouples depending on the temperature range
- Heat shields adapted to process requirements
- HMI interface on a 22-inch PC monitor
- Ethernet TCP/IP connection
- Support frame on legs

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